i-CREATe
&WRRC 2024
Shanghai, China

2024 International Convention on Rehabilitation Engineering and Assistive Technology
& WORLD REHABILITATION ROBOT CONVENTION

INTELLIGENT TECHNOLOGY EMPOWERS THE FUTURE OF REHABILITATION

Convention Handbook

Shanghai, China
23-26 August 2024

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亚洲康复工程与辅助技术联盟

上海理工大学

CAAP
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We are honored to host the 2024 International Convention on Rehabilitation Engineering and Assistive Technology & World Rehabilitation Robot Convention (i-CREATe & WRRC 2024). Our shared commitment to advancing assistive technologies underscores the significance of our collective efforts in enhancing the quality of life for the elderly and individuals with disabilities. This convention serves as a crucial platform for not only acknowledging the strides we have made but also for addressing the current challenges and charting the course for future developments in rehabilitation engineering and technology.

In 2015, the Coalition of Rehabilitation Engineering and Technology, Asia (CREATe Asia) was formally established in Singapore, witnessed by Honorable Her Royal Highness Princess Maha Chakri Sirindhorn. It is expected that CREATe Asia will lead the industry of assistive products to a new historic era and stage. The year of 2024 will be the 9th year after the founding of CRAETe Asia, and the 3rd time comes to Shanghai after i-CREATe 2010 and i-CREATe 2018 being successfully held in Shanghai. We welcome our friends and colleagues to join the convention in shanghai again.

The international rehabilitation assistive devices are evolving towards intelligent development. Rehabilitation robots will become a highland in the rehabilitation assistive devices industry and play a crucial role as a key technological support in addressing an aging society. WRRC aims to create the first comprehensive global summit forum on rehabilitation robotics. The convention is dedicated to exploring the development of rehabilitation robotics technology and industry, which may inspire innovative breakthroughs in the field of neural rehabilitation and highlight the societal impact.

The theme of the conference is Intelligent Technology Empowers the Future of Rehabilitation, which calls for unified communication and collaboration across Asia and the entire world, fostering scientific innovation and propelling the development of the assistive products industry. This conference promises an array of engaging modules designed to stimulate dialogue, innovation, and collaboration, including a) academic conference including plenary session and a series of other sessions and workshops, b) global student innovation challenge (gSIC), c) global rehabilitation robots entrepreneurship competition (GREEC), d) international forum on development of assistive products industry, e) international forum on humanoid robotics in rehabilitation, etc.

In the past few years, China has experienced a tremendous development in rehabilitation engineering and assistive technology. We welcome our friends and colleagues to join this glory event in shanghai, and to share the information and knowledge about the most recent development of assistive technology in China, and also from all over the world. Let's work together to make i-CREATe & WRRC 2024 to be one of the most academically rich, culturally enjoyable conferences. Together, let us witness the transformational impact of intelligent technology on rehabilitation and explore the forefront of innovation in assistive products.

We extend our warmest welcome to you!

Hongliu YU
- General Chair of i-CREATe & WRRC 2024
- President-elect of CREATe Asia
- Director of Institute of Intelligent Rehabilitation Engineering, University of Shanghai for Science and Technology (USST)

Introduction of CREATe Asia

The Coalition on Rehabilitation Engineering and Assistive Technology of Asia (CREATe Asia) is composed of more than ten organizations from states and regions of Thailand, Singapore,China, Japan, South Korea, Australia, New Zealand, Taiwan, Hong Kong and Malaysia. Officially established in Singapore in 2015 under the witness of Her Royal Highness Princess Sirindhorn of the Kingdom of Thailand, the secretariat is based in Singapore while the organisation is registered in Australia.

CREATe Asia is a non-profit industry organization that aims to establish a cooperative platform for rehabilitation engineering technology in Asia, to promote the progress of related technologies and industries, and enable disabled individuals in Asia and around the world to share the achievements of global advancements in rehabilitation engineering. i-CREATe is the CREATe Asia's annual academic conference. After 17 years of development, it has become one of the most well-known and influential rehabilitation engineering conferences in the world.

Introduction of USST

The University of Shanghai for Science and Technology (USST), a key multidisciplinary applied research-oriented university , is one of the oldest universities in China with over 110 years' history. With boasting engineering as its core discipline,USST has become one of the first batch of pilot units for the construction of a high-level local institution of higher education in Shanghai. USST consists of 18 colleges, schools and departments with more than 27,000 full-time students, of whom over 16,000 are undergraduate students and 10,000 plus graduate students. Of its 2,700 faculty & staff members, there are 7 academicians of Chinese Academy of Sciences, and Chinese Academy of Engineering (adjunct academicians included). USST has grown up into a leading university in the fields of intelligent manufacturing, medical devices, rehabilitation engineering, with establishment of the earliest discipline of mechanical engineering, medical engineering and the first undergraduate program of rehabilitation engineering in China.

Introduction of CAAP

The China Association of Assistive Products (former China Association of Prosthetics and Orthotics) was established in November 1986. It is a national, industry-specific, non-profit social organization registered and managed under the Ministry of Civil Affairs of P.R.C. The association is composed of related enterprises, institutions, and social groups in the industry of rehabilitation assistive products, as well as professionals, medical personnel, experts, and scholars who are engaged in or passionate about the rehabilitation assistive products. It is a 5A-level social organization with independent legal personality and a member of the International Society of Prosthetics and Orthotics (ISPO).

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University of Shanghai for Science and Technology (USST)
China Association of Assistive Products (CAAP)

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Chinese Society of Biomedical Engineering (CSBME)
China Association of Rehabilitation of Disabled Persons (CARDP)
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Shanghai Engineering Research Center of Assistive Devices (SERCAD)
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Rehabilitation Engineering Society of Japan (RESJA)
Korean Association of Assistive Technology Professionals (KAATP)
Rehabilitation International Korea, Seoul (RI Seoul)
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Shanghai Medical Doctors Association(SHMDA)
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2024/8/23

Time	Sessions
08:00-12:00	"Sunnyou Cup" Global Student Innovation Challenge (Diamond Grand Ballroom C / 1F) · "AI-ROBOT Cup" Global Rehabilitation Robot Entrepreneurship Competition (Pink Diamond Room A / 3F) · Social Tour · Technical Tour
12:00-13:30	Exhibition and Lunch
13:30-15:30	"Sunnyou Cup" Global Student Innovation Challenge (Diamond Grand Ballroom C / 1F) · Technical Tour (Zhang Jiang High Tech Park) · Workshop : Challenges for the Uptake and Transfer of Person-centred Technology for Independent Living of Older Adults (Ruby Ballroom D / 3F) · Workshop: Human Behavior Perception and Intelligent Rehabilitation (Pink Diamond Room B / 3F) · Workshop : Neuro-enhancement Rehabilitation Technology (Ruby Ballroom B / 3F) · Workshop : The Clinical Application of Rehabilitation Engineering(I) (Ruby Ballroom C / 3F) · Workshop : Application of Assistive Devices in Occupational Therapy (Ruby Ballroom E / 3F)
15:30-15:40	Coffee Break
15:40-17:40	"Sunnyou Cup" Global Student Innovation Challenge (Diamond Grand Ballroom C / 1F) (Pink Diamond Room A / 3F) · Workshop : Promoting access to Assistive Technology for all: Lessons and recommendations from "The Global Report on Assistive Technology" (Ruby Ballroom D / 3F) · Workshop : Markerless Mocap in Healthcare Research & Translation (Pink Diamond Room B / 3F) · Workshop : Advances in Theory and Practice of Brain-Computer Intelligence and Rehabilitation Technolofies (Ruby Ballroom B / 3F) · Workshop : The Clinical Application of Rehabilitation Engineering(II) (Ruby Ballroom C / 3F) · Workshop : Application of Intelligent Rehabilitation Robots (Ruby Ballroom E / 3F)

2024/8/24

Time	Sessions
08:00-09:40	Opening Ceremony (Diamond Grand Ballroom A-C / 1F)
09:40-09:50	Coffee Break
09:50-12:00	Plenary Speech (Diamond Grand Ballroom A-C / 1F)
12:00-13:15	Exhibition and Lunch
13:15-15:20	Summit Forum on Humanoid Robotics for Rehabilitation (Ruby Ballroom A-C / 3F) · Summit Forum on Cutting-edge Technology in Rehabilitation Robotics (Pink Diamond Room A/3F) · Summit Forum on Rehabilitation Medicine-Engineering Integration (Diamond Grand Ballroom C /1F) · Technical Session (i-CREATe2024) Virtual Reality and Electromyography Rehabilitation (Pink Diamond Room B / 3F) · Technical Session (i-CREATe2024) Digital Rehabilitation Technology (Wedding Palace / 3F) · Technical Session (WRRC 2024) Intelligent Upper Limb Prostheses Technology (Ruby Ballroom E / 3F) · Technical Session (WRRC 2024) Emerging Technologies in Neurorehabilitation Robots (Ruby Ballroom D / 3F)
15:20-15:30	Coffee Break
15:30-17:30	Technical Session (i-CREATe2024) Intelligent Visual Enhancement and Visual Rehabilitation (Pink Diamond Room B / 3F) · Technical Sessio (i-CREATe2024) Speech and Cognitive Devices (Wedding Palace / 3F) · Technical Session (WRRC 2024) Intelligent Lower Limb Prostheses Technology (Ruby Ballroom E / 3F) · Technical Session (WRRC 2024) Neural Rehabilitation Robot in Clinical Scenario (Ruby Ballroom D / 3F)
18:00-20:30	Gala Dinner (Dress code: Business Attire) (Diamond Grand Ballroom A-B / 1F)
20:30-21:30	Work Meeting on Technical Committee of Rehabilitation Engineering and Industry Development, Chinese Association of Rehabilitation Medicine(CREID-CARM) (Pink Diamond Room B / 3F)

2024/8/25

Time	Session 1	Session 2	Session 3	Session 4
08:30-10:00	Plenary Speech (i-CREATe 2024) (Diamond Grand Ballroom A / 1F)		Plenary Speech (WRRC 2024) (Diamond Grand Ballroom B / 1F)	
10:00-10:20	Coffee Break			
10:20-12:00	Plenary Speech (i-CREATe 2024) (Diamond Grand Ballroom A / 1F)		Plenary Speech (WRRC 2024) (Diamond Grand Ballroom B / 1F)	
12:00-13:15	Exhibition and Lunch			
13:15-15:20	Summit Forum on Wearable Rehabilitation Robotics (Diamond Grand Ballroom C / 1F)	Summit Forum on Elderly Care Technology and Nursing Robots (Diamond Grand Ballroom A / 1F)	Summit Forum on Intelligent Rehabilitation Engineering and Assistive Products for Traditional Chinese Medicine (Pink Diamond Room A / 3F)	Technical Session (i-CREATe2024) New Technologies in Intelligent Rehabilitation (Ruby Ballroom B / 3F) — Technical Session (i-CREATe 2024) Brain Function Detection and Neuromodulation (Ruby Ballroom C / 3F) — Technical Session (i-CREATe 2024) New Technologies and Devices in Hand Rehabilitation (Ruby Ballroom D / 3F) — Technical Session (WRRC 2024) Exoskeleton Robotics Technology (Ruby Ballroom E / 3F)
15:20-15:30				Coffee Break
15:30-17:30				Technical Session (i-CREATe 2024) Research and Development of Motor Cognitive Interaction Technology and Equipment (Ruby Ballroom B / 3F) — Technical Session (i-CREATe 2024) New Technologies in Pediatric Rehabilitation (Ruby Ballroom C / 3F) — Technical Session (i-CREATe 2024) Intelligent Adaptation Technology for Assistive Devices (Ruby Ballroom D / 3F) — Technical Session (WRRC 2024) Forum on Intelligent Medical Care and Elderly Care Integration (Ruby Ballroom E / 3F)

2024/8/26

Time	Session
08:20-10:20	The 2nd International Summit Forum on the Development of Rehabilitation Equipment Industry (Diamond Grand Ballroom A / 1F) — Technical Session(i-CREATe 2024) Rehabilitation Engineering and Industrial Design (Ruby Ballroom C / 3F) — Technical Session(i-CREATe 2024) Youth Scientist Forum on Rehabilitation Engineering (Ruby Ballroom D / 3F) — Technical Session(WRRC 2024) Intelligent Assistive Locomotion Robots (Ruby Ballroom B / 3F) — Technical Session(WRRC 2024) Human-machine Collaboration in Rehabilitation Robot (Ruby Ballroom E / 3F)
10:20-10:30	Coffee Break
10:30-12:30	Technical Session(i-CREATe 2024) Biomechanics in Rehabilitation Engineering (Ruby Ballroom C / 3F) — Technical Session(i-CREATe 2024) Brain-computer Interface and Rehabilitation Engineering (Ruby Ballroom D / 3F) — Technical Session(WRRC 2024) Intelligent Nursing Technology for the Bedridden Elderly (Ruby Ballroom B / 3F) — Technical Session(WRRC 2024) Intelligent Wearable Technology (Ruby Ballroom E / 3F)
13:00-14:00	CREATe Asia General Assembly Meeting (Pink Diamond Room B / 3F)
14:00-15:00	Technical Session (WRRC 2024) Innovative Design and Application of Rehabilitation Robot (Ruby Ballroom B / 3F) — Technical Session (WRRC 2024) Intelligent Rehabilitation and Motion Monitoring (Ruby Ballroom C / 3F) — Technical Session (i-CREATe2024) Intelligent Rehabilitation and Assistive Technology (Ruby Ballroom D / 3F) — Technical Session (i-CREATe2024) Innovative Neurorehabilitation technology (Ruby Ballroom E / 3F) — Technical Session (i-CREATe2024) Intelligent Human Motion Analysis and Assistive Technology (Diamond Room A / 1F) — Founding Meeting of Technical Committee of Rehabilitation Robots under Shanghai Rehabilitation Device Association (Pink Diamond Room B / 3F)
15:00-16:40	Plenary Speech & Closing Ceremony (Diamond Grand Ballroom A / 1F)

2024/8/27

Time	Session
09:00-12:00	Technical Tour

International Convention on Rehabilitation Engineering and Assistive Technology & World Rehabilitation Robot Convention 2024 (i-CREATe & WRRC 2024)

Conference Details

22 August 2024

18:00-21:00	gSIC Exhibition Preparation	Diamond Grand Ballroom D / 1F

23 August 2024

08:00-20:00	Registration for i-CREATe & WRRC 2024	Lobby
08:00-12:00	Social Tour	
09:00-18:00	Sunnyou Cup gSIC Competition - Technology Sunnyou Cup gSIC Competition - Design	Diamond Grand Ballroom D / 1F Pink Diamond Room A / 3F
08:30-12:00	AI-ROBOT Cup Global Rehabilitation Robot Entrepreneurship Competition	Innovhill
14:00-15:30	Technical Tour	Zhang Jiang High Tech Park
13:30-15:30	**Workshop:** Challenges for the Uptake and Transfer of Person-centred Technology for Independent Living of Older Citizens: an Interactive Dialogue Workshop	Ruby Ballroom D / 3F
15:40-17:40	**Workshop:** Promoting Access to Assistive Technology for all: Lessons and recommendations from The Global Report on Assistive Technology	Ruby Ballroom D / 3F
13:30-15:30	**Workshop:** Human Behavior Perception and Intelligent Assistied Rehabilitation	Pink Diamond Room B / 3F
15:40-17:40	**Workshop:** Markerless Mocap in Healthcare Research & Translation	Pink Diamond Room B / 3F
13:30-15:30	**Workshop:** Neuro-enhancement Rehabilitation Technology	Ruby Ballroom B / 3F
15:40-17:40	**Workshop:** Advances in Theory and Clinical Applications of Brain-Computer Interface (BCI) Intelligent Rehabilitation Technologies	Ruby Ballroom B / 3F
13:30-15:30	**Workshop:** The Clinical Application of Rehabilitation Engineering(I)	Ruby Ballroom C / 3F
15:40-17:40	**Workshop:** The Clinical Application of Rehabilitation Engineering(II)	Ruby Ballroom C / 3F
13:30-15:30	**Workshop:** The Application of Assistive Devices in Occupational Therapy	Ruby Ballroom E / 3F

15:40-17:40	**Workshop:** Application of Intelligent Rehabilitation Robot	Ruby Ballroom E / 3F

24 August 2024

08:00-09:50	**Opening Ceremony**	Diamond Grand Ballroom A-C / 1F
09:50-12:00	**Plenary Speech**	Diamond Grand Ballroom A-C / 1F
13:15-17:30	Summit Forum on Humanoid Robotics for Rehabilitation	Ruby Ballroom A-C / 3F
13:15-17:30	Summit Forum on Cutting-edge Technology in Rehabilitation Robotics	Pink Diamond Room A / 3F
13:15-17:30	Summit Forum on Rehabilitation Medicine-Engineering Integration	Diamond Grand Ballroom C / 1F
13:20-15:20	Technical Session (i-CREATe2024) Virtual Reality and Electromyography Rehabilitation	Pink Diamond Room B / 3F
15:30-17:30	Technical Session (i-CREATe2024) Intelligent Visual Enhancement and Visual Rehabilitation	Pink Diamond Room B / 3F
13:20-15:20	Technical Session (i-CREATe2024) Digital Rehabilitation Technology	Wedding Palace / 3F
15:30-17:30	Technical Session (i-CREATe2024) Speech and Cognitive Devices	Wedding Palace / 3F
13:20-15:20	Technical Session (WRRC 2024) Intelligent Upper Limb Prostheses Technology	Ruby Ballroom E / 3F
15:30-17:30	Technical Session (WRRC 2024) Intelligent Lower Limb Prostheses Technology	Ruby Ballroom E / 3F
13:20-15:20	Technical Session (WRRC 2024) New Technology of Neural Rehabilitation Robot	Ruby Ballroom D / 3F
15:30-17:30	Technical Session (WRRC 2024) Neural Rehabilitation Robot in Clinical Scenario	Ruby Ballroom D / 3F
18:00-20:30	**Gala Dinner**	Diamond Grand Ballroom A-B / 1F
20:30-21:30	Work Meeting on Technical Committee of Rehabilitation Engineering and Industry Development, Chinese Association of Rehabilitation Medicine(CREID-CARM)	Pink Diamond Room B / 3F

25 August 2024

08:30-12:00	**Plenary Speech (i-CREATe 2024)**	Diamond Grand Ballroom A / 1F
08:30-12:00	**Plenary Speech (WRRC 2024)**	Diamond Grand Ballroom B / 1F
13:15-17:30	Summit Forum on Wearable Rehabilitation Robotics	Diamond Grand Ballroom C / 1F

Time	Session	Location
13:15-17:30	Summit Forum on Elderly Care Technology and Nursing Robots	Diamond Grand Ballroom A / 1F
13:15-17:30	Summit Forum on Intelligent Rehabilitation Engineering and Assistive Products for Traditional Chinese Medicine	Pink Diamond Room A / 3F
13:25-15:20	Technical Session (i-CREATe2024) New Technologies in Intelligent Rehabilitation	Ruby Ballroom B / 3F
15:30-17:30	Technical Session (i-CREATe 2024) Research and Development of Motor Cognitive Interaction Technology and Equipment	Ruby Ballroom B / 3F
13:25-15:20	Technical Session (i-CREATe 2024) Brain Function Detection and Neuromodulation	Ruby Ballroom C / 3F
15:30-17:30	Technical Session (i-CREATe 2024) New Technologies in Pediatric Rehabilitation	Ruby Ballroom C / 3F
13:25-15:20	Technical Session (i-CREATe 2024) New Technologies and Devices in Hand Rehabilitation	Ruby Ballroom D / 3F
15:30-17:30	Technical Session (i-CREATe 2024) Intelligent Adaptation Technology for Assistive Devices	Ruby Ballroom D / 3F
13:25-15:20	Technical Session (WRRC 2024) Exoskeleton Robotics Technology	Ruby Ballroom E / 3F
15:30-17:30	Technical Session (WRRC 2024) Forum on Intelligent Medical Care and Elderly Care Integration	Ruby Ballroom E / 3F

26 August 2024

Time	Session	Location
08:30-12:30	The 2nd International Summit Forum on the Development of Rehabilitation Equipment Industry	Diamond Grand Ballroom A / 1F
08:20-10:20	Technical Session (WRRC 2024) Intelligent Walking Assistant Robot	Ruby Ballroom B / 3F
10:30-12:30	Technical Session (WRRC 2024)Intelligent Nursing Technology for the Bedridden Elderly	Ruby Ballroom B / 3F
08:20-10:20	Technical Session (i-CREATe 2024) Rehabilitation Engineering and Industrial Design	Ruby Ballroom C / 3F
10:30-12:30	Technical Session (i-CREATe 2024) Biomechanics in Rehabilitation Engineering	Ruby Ballroom C / 3F
08:20-10:20	Technical Session(i-CREATe 2024) Youth Scientist Forum on Rehabilitation Engineering	Ruby Ballroom D / 3F

Time	Session	Location
10:30-12:30	Technical Session (i-CREATe 2024) Brain-computer Interface and Rehabilitation Engineering	Ruby Ballroom D / 3F
08:20-10:20	Technical Session (WRRC 2024) Human-Machine Collaboration in Rehabilitation Robot	Ruby Ballroom E / 3F
10:30-12:30	Technical Session (WRRC 2024) Intelligent Wearable Technology	Ruby Ballroom E / 3F
13:00-15:00	Technical Session (WRRC 2024) Innovative Design and Application of Rehabilitation Robot	Ruby Ballroom B / 3F
13:00-15:00	Technical Session (WRRC 2024) Intelligent Rehabilitation and Motion Monitoring	Ruby Ballroom C / 3F
13:00-15:00	Technical Session (i-CREATe 2024) Intelligent Rehabilitation and Assistive Technology	Ruby Ballroom D / 3F
13:00-15:00	Technical Session (i-CREATe 2024) Innovative Neurorehabilitation Technology	Ruby Ballroom E / 3F
13:00-15:00	Technical Session (i-CREATe 2024) Intelligent Human Motion Analysis and Assistive Technology	Diamond Grand Ballroom A / 1F
13:00-14:00	CREATe Asia General Assembly Meeting	Pink Diamond Room B / 3F
14:00-15:00	Founding Meeting of Technical Committee of Rehabilitation Robots under Shanghai Rehabilitation Device Association	Pink Diamond Room B / 3F
15:00-16:00	**Plenary Speech**	Diamond Grand Ballroom A / 1F
16:00-16:40	**Closing Ceremony**	Diamond Grand Ballroom A / 1F

23-25 August 2024

Time	Session	Location
08:00-17:30	Works Show of gSIC2024	Diamond Grand Ballroom D / 1F
	Works Show of GRREC2024	Lobby

23-26 August 2024

Time	Session	Location
08:00-17:30	Innovative Rehabilitation Engineering Products Exhibition	Pre-funtion Hall

27 August 2024

Time	Session	Location
09:00-12:00	Technical Tour	

Workshop: Challenges for the Uptake and Transfer of Person-centred Technology for Independent Living of Older Adults

Workshop Chair: Prof.Evert-Jan Hoogerwerf

8/23 13:30-15:30	Ruby Ballroom D / 3F
Moderator:	**Prof. Evert-Jan Hoogerwerf** Association for the Advancement of Assistive Technology in Europe (AAATE)
13:30-15:30	Challenges for the Uptake and Transfer of Person-centred Technology for Independent Living of Older Adults
	Prof. Evert-Jan Hoogerwerf Association for the Advancement of Assistive Technology in Europe (AAATE)
	Dr. Valentina Fiodelmondo We CareMore Centre for Research and Innovation of AIAS Bologna onlus, Italy
	Prof. Luc De Witte Global Alliance of Assistive Technology Organizations

Workshop: Promoting Access to Assistive Technology for All: Lessons and Recommendations from The Global Report on Assistive Technology

Workshop Chair: Prof. Luc De Witte

8/23 15:40-17:40	Ruby Ballroom D / 3F
Moderator:	**Prof. Luc De Witte** Global Alliance of Assistive Technology Organizations(GAATO)
15:40-15:50	Introduction of the Global Report and the Main Recommendations
	Prof. Luc De Witte Global Alliance of Assistive Technology Organizations(GAATO)
15:50-16:00	The Situation of Europe
	Prof. Evert-Jan Hoogerwerf Global Alliance of Assistive Technology Organizations(GAATO)
16:00-16:10	The Situation of Hong Kong, China
	Mr. Simon Wong Coalition of Rehabilitation Engineering and Assistive Technology of Asia(CREATe Asia)
16:10-16:20	The Situation of China
	Mr. Deming Kong China Assistive Devices and Technology Center for Persons with Disablities
16:20-16:30	The Situation of Taiwan, China
	Prof. Kathy Cheng Global Alliance of Assistive Technology Organizations(GAATO)
16:30-16:40	Application of Assistive Devices for the Disabled in Shanghai
	Prof. Rui Zhu Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center)
16:40-17:40	General Discussion with the Audience
	Prof. Evert-Jan Hoogerwerf Global Alliance of Assistive Technology Organizations(GAATO)

Workshop: Human Behavior Perception and Intelligent Rehabilitation

Workshop Chair: Dr. Zhiyong Wang

8/23 13:30-15:30	Pink Diamond Room B/3F

Moderator:	**Dr. Zhiyong Wang**
	Harbin Institute of Technology, Shenzhen
13:30-13:50	Advances in Early Diagnosis and Intervention of Autism Based on Machine Assistance
	Dr. Zhiyong Wang
	Harbin Institute of Technology, Shenzhen
13:50-14:10	Noninvasively Decoding Motor Neuron Discharges for Human-machine Interaction
	Dr. Chen Chen
	Shanghai Jiao Tong University
14:10-14:30	Motor Function Assessment and Intelligent Rehabilitation Application Based on Muscle Synergy
	Dr. Yixuan Sheng
	Harbin Institute of Technology, Shenzhen
14:30-14:50	Neural Interface for Decoding of Continuous Wrist-Hand Movement
	Dr. Yang Yu
	Shanghai Jiao Tong University
14:50-15:10	Vision-based Control for Soft Robots
	Dr. Fan Xu
	Shanghai Jiao Tong University
15:10-15:30	Advancements in Learning-Based Control: Transforming the Mobility of Legged Robots and Their Real-World Applications
	Prof.Yue Gao
	Shanghai Jiao Tong University

Workshop: Markerless Mocap in Healthcare Research & Translation

Workshop Chair: Prof. Wei Tech Ang

8/23 15:40-17:40	Pink Diamond Room B/3F

Moderator:	**Prof. Wei Tech Ang**
	Nanyang Technlogical University
15:40-15:50	Introduction of Objective Measurements in Biomechanical Research /Clinical Practice
	Prof. Wei Tech Ang
	Nanyang Technlogical University
15:50-16:05	Development of Data-driven Markerless Multi-camera Motion Capture System
	Dr. Prayook Jatesiktat
	Nanyang Technlogical University
16:05-16:55	Markerless Mocap in Healthcare Research
	Prof. Kenneth Fong
	The Hong Kong Polytechnic University
	Dr. Junliang Lau
	Singapore General Hospital
	Dr. Phunsuk Kantha(online)
	Mahidol University
	Dr. Longbin Zhang(online)
	Nanyang Technlogical University
16:55-17:20	Live Demonstration of the Markerless Mocap System.
	Dr. Prayook Jatesiktat
	Nanyang Technlogical University
17:20-17:40	Q&A + Discussion
	Prof. Wei Tech Ang
	Nanyang Technlogical University

Workshop: Neuro-enhancement Rehabilitation Technology

Sponsor: MagVenture Medical Technology (Shanghai) Co., Ltd.

Workshop Chair: Prof. Dongsheng Xu

8/23 13:30-15:30   Ruby Ballroom B / 3F

Moderator:	**Prof. Dongsheng Xu** Shanghai University of Traditional Chinese Medicine
13:30-13:40	Clinical Strategies for Neuroenhancement Technologies **Prof. Dongsheng Xu** Shanghai University of Traditional Chinese Medicine
13:40-14:05	TMS Applications in Stroke and Brain Trauma **Mr. Matthias Kienle** MagVenture A/S
14:05-14:30	TMS in Patients with Post-stroke Aphasia **Dr. Ruiping Hu** Huashan Hospital affiliated to Fudan University
14:30-15:30	TMS Operation Demonstration **Mr. Jun Zhang** Wuhan Apex Healthcare Technology Co.,Ltd

Workshop: Advances in Theory and Clinical Applications of Brain-Computer Interface (BCI) Rehabilitation Technologies

Workshop Chair: Prof. Jue Wang

8/23 15:40-17:40   Ruby Ballroom B / 3F

Moderator:	**Prof. Jue Wang** Xi'an Jiaotong University
15:40-16:10	Digital Brain & Intelligent Rehabilitation **Prof. Jue Wang** Xi'an Jiaotong University
16:10-16:40	Brain-computer Interface and Neuromodulation: Complementary Clinical Needs **Prof. Dongsheng Xu** Shanghai University of Traditional Chinese Medicine
16:40-17:10	The Fundamental Principles and Advancement on Applications of Brain-Computer Interfaces **Prof. Yulong Bai** Huashan Hospital Affiliated to Fudan University
17:10-17:40	General Brain-computer Interface Intelligent Rehabilitation Robot Products and Training **Mr. Haochong Wang** Xi 'an ZhenTec Intelligent Technology Co., LTD

Workshop: The Clinical Application of Rehabilitation Engineering(I)

Sponsor: Klarity Medical & Equipment Co., Ltd.

Workshop Chair: Mr. Simon Wong

8/23 13:30-15:30	Ruby Ballroom C / 3F
Moderator:	**Mr. Simon Wong**
	Hong Kong Institute of Occupational Therapy
13:30-14:00	The Design and Application of Simon's Ring: Theory
	The Design and Application of Simon's Ring: Practice
	Mr. Simon Wong
14:00-15:30	Hong Kong Institute of Occupational Therapy

Workshop: The Clinical Application of Rehabilitation Engineering(II)

Sponsor: Klarity Medical & Equipment Co., Ltd.

Workshop Chair: Mr. Simon Wong

8/23 15:40-17:40	Ruby Ballroom C / 3F
Moderator:	**Prof. Dawei Zhou**
	Beijing College of Social Administration
15:40-17:40	Practice of Innovative Design System for Orthotics Based on Cloud Platform
	Prof. Dawei Zhou
	Beijing College of Social Administration

Workshop: The Application of Assistive Devices in Occupational Therapy

Workshop Chair: Prof. Kuicheng Li

8/23 13:30-15:30	Ruby Ballroom E / 3F
Moderator:	**Prof. Kuicheng Li**
	Rehabilitation Medicine School of Shandong Second Medical University
13:30-14:00	The Selection, Adaptation and Usage Training of Wheelchair
	Prof. Kuicheng Li
	Rehabilitation Medicine School of Shandong Second Medical University
14:00-14:30	Application of 3D Printing Technology in Occupational Therapy
	Dr. Jiani Lu
	Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center)
14:30-15:00	Application and Expansion of Intelligent Assistive Devices in Occupational Therapy
	Dr. Xiaoyu Lou
	Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center)
15:00-15:20	Q&A + Discussion

Workshop: Application of Intelligent Rehabilitation Robots

Sponsor: Shanghai Golden Arrow Robot Technology Co.,Ltd

Workshop Chair: Prof. Shuai Guo, Prof. Xuyun Hua

8/23 15:40-17:40　　　　　Ruby Ballroom E / 3F

Moderator:	**Ms. Qian Zhang** Shanghai Golden Arrow Robot Technology Co., Ltd
15:40-16:10	Robot-based Rehabilitation Technology and Clinical Research
	Prof. Wen Li
	The Second Affiliated Hospital of Wannan Medical College
16:10-16:40	Medical Neuroscience Principles of Intelligent Upper Limb Rehabilitation Robots
	Prof. Xuyun Hua
	Shanghai University of Traditional Chinese Medicine
16:40-17:10	Intelligent Rehabilitation--Research on Clinical Application of Rehabilitation Robot Based on Virtual Reality
	Prof. Liguo Chang
	The Third People Hospital in Liaocheng
17:10-17:40	Cutting-edge Applications and Future Perspectives of Wirtual Reality (VR) Technology in Pulmonary Function Rehabilitation Therapy
	Prof. Lang Shuai
	The First Affiliated Hospital of Nanchang University

Opening Ceremony

8/24　08:00-12:00　　　　　Diamond Grand Ballroom A-C / 1F

Moderator:	**Prof. Zhong Zhang**
	Vice President of University of Shanghai for Science and Technology
08:30-09:20	Welcome Address
	Prof. Hongliu Yu
	General Chair of i-CREATe & WRRC 2024
	University of Shanghai for Science and Technology / Coalition on Rehabilitation Engineering and Assistive Technology of Asia
	Address by Leaders
09:20-09:40	Launch Ceremony of i-CREATe & WRRC 2024
09:40-09:50	Coffee Break

Plenary Speech

Moderator:	**Prof. Jie Zhao** Harbin Institute of Technology
	Prof. Etienne Burdet Imperial College London
09:50-10:20	The Evolution of Exoskeletons for Gait Rehabilitation and Assistance
	Prof. Robert Riener
	ETH Zurich
10:20-10:50	Biomechanics in Life Sciences and Health Care: Research and Applications
	Prof. Yubo Fan
	Beihang University
10:50-11:00	New Product Launch Event of Xiangyu Medical Co., Ltd.
Moderator:	**Prof. José L. Pons** Northwestern University
	Prof. Michael Goldfarb Vanderbilt University
11:00-11:30	Rehabilitation Robotics: Improving Everyday Functions after Impairments
	Prof. Sunil K. Agrawal
	Columbia University in the City of New York
11:30-12:00	Robot Manipulation and Control
	Prof. Bruno Siciliano
	Università degli studi di Napoli Federico II

Summit Forum on Humanoid Robotics and Rehabilitation Engineering

Sponsors: Beijing Nokov Science & Technology Co.,Ltd., Shanghai Caohejing Hi-Tech Park

Forum Chairs: Prof. Hongliu Yu, Prof. Bruno Siciliano

8/24 13:15-17:30 Ruby Ballroom A-C / 3F

Moderator:	**Prof. Bingshan Hu** University of Shanghai for Science and Technology
13:15-13:30	Opening Ceremony
Moderator:	**Prof. Shijie Guo** Hebei University of Technology **Prof. Zhijun Li** Tongji University
13:30-13:55	Robotics Meet AI: The Future is Now! **Prof. Bruno Siciliano** Università degli studi di Napoli Federico II
13:55-14:20	Layagrity Robotics: Inspiration from the Human Musculoskeletal System **Prof. Lei Ren** Jilin University
14:20-14:45	Technical Challenges and Progress of Humanoid Robots **Prof. Rong Xiong** Zhejiang University
14:45-15:10	Development and Challenges of Multimodal Bipedal Humanoid Robots **Prof. Qingdu Li** University of Shanghai for Science and Technology
15:10-15:20	Coffee Break
Moderator:	**Prof. Weidong Chen** Shanghai Jiao Tong University **Prof. Xuguang Lan** Xi'an Jiaotong University
15:20-15:45	Innovation Design and Applications of Robotic Manipulators **Prof. Dan Zhang** The Hong Kong Polytechnic University
15:45-16:10	Intelligent Prosthetic Hand and Humanoid Robot Hand: Progress and Challenges **Prof. Li Jiang** Harbin Institute of Technology
16:10-16:35	Open-source Innovation Powers the Future of the Humanoid Robot Industry **Prof. Lei Jiang** National-Local Collaborative Humanoid Robotics Innovation Center
16:35-17:20	Roundtable Discussion: The Future of Humanoid Robots in Rehabilitation
Moderator:	**Prof. Hongliu Yu** University of Shanghai for Science and Technology **Prof. Shengquan Xie** University of Leeds
	Prof. Rong Xiong, Zhejiang University **Prof. Feng Gao**, Shanghai Jiao Tong University **Prof. Xugunag Lan**, Xi'an Jiaotong University **Prof. Lei Jiang**, National and Local Collaborative Humanoid Robot Innovation Center **Mr. Zhihao Yang**, Shanghai Fourier Intelligence Co., Ltd.

Summit Forum on Cutting-edge Technology in Rehabilitation Robotics

Sponsor: Shanghai Chingmu Vision Technology Co.,Ltd

Forum Chairs: Prof. Xilun Ding, Prof. Aiguo Song, Prof. Xinyu Wu

8/24 13:15-17:30 Pink Diamond Room A / 3F

Moderator:	**Prof. Yagang Wang** University of Shanghai for Science and Technology
13:15-13:30	Opening Ceremony
Moderator:	**Prof. Shaoping Bai** Aalborg University **Prof. Chi Zhu** Shenzhen Technology University
13:30-13:55	Development of Adaptive lower limb Rehabilitation Exoskeleton Robot in Robotics Institute of Beihang University **Prof. Xilun Ding** Beihang University
13:55-14:20	Advanced Robotics with Enhanced Autonomy and Intelligence for Effective Medical **Prof. Shengquan Xie** University of Leeds
14:20-14:45	Active Control and Interaction for Rehabilitation Robots **Prof. Zengguang Hou** Institute of Automantion, Chinese Academy of Sciences
14:45-15:00	Evaluation and Learning: The Application of Motion Capture Systems in Rehabilitation Engineering **Mr. Haiwei Zhang** Chingmu Tech Ltd.
15:00-15:10	Coffee Break
Moderator:	**Prof. Xinyu Wu** Shenzhen Institute of Advanced Technology **Prof. Raymond Kai-yu Tong** Hong Kong Chinese University
15:10-15:35	Development and Challenges of Non-invasive Brain- Computer Interface **Prof. Dong Ming** Tianjin University
15:35-16:00	Big Data and AI in Stroke Rehabilitilation **Prof. Qingmei Wang** Harvard Medical School
16:00-16:25	A Metaverse for Motor Neurorehabilitation **Prof. James Patton** University of Illinois at Chicago
16:25-16:50	Autonomous Mind Development Robot and Behavior Learning **Prof. Wenqiang Zhang** Fudan University
16:50-17:15	Explore Functional Corticomuscular Coupled Information forMedical Devices and System **Prof. Honghai Liu** Harbin Institute of Technology, Shenzhen

Summit Forum on Rehabilitation Medicine-Engineering Integration

Forum Chairs: Prof. Jiejiao Zheng, Prof. Monic A Perez, Prof. Dongsheng Xu

8/24 13:15-17:30   Diamond Grand Ballroom C / 1F

Moderator:	**Prof. Dongsheng Xu** Shanghai University of Traditional Chinese Medicine

13:15-13:30	Opening Ceremony

Moderator:	**Prof. Jianjun Li** China Rehabilitation Research Center **Prof. Xiquan Hu** The Third Affiliated Hospital, Sun Yat-sen University

13:30-13:55	How do we Assess Synaptic Transmission in Humans **Prof. Monica A. Perez** Northwestern University
13:55-14:20	Strategic Thinking and Practice of Internet Rehabilitation **Prof. Chengqi He** West China Hospital of Sichuan University
14:20-14:45	Digital Healthcare Boosts Geriatric Rehabilitation **Prof. Jiejiao Zheng** Huadong Hospital Affiliated to Fudan University
14:45-15:10	Human-Robot Systems and Its Dynamic Learning on Rehabilitation Robots **Prof. Hong Cheng** University of Electronic Science and Technology of China
15:10-15:20	Coffee Break

Moderator:	**Prof. Mouwang Zhou** Peking University Third Hospital **Prof. Dongfeng Huang** The Seventh Affiliated Hospital, Sun Yat-sen University

15:20-15:45	New Trends in the Future Development of Rehabilitation **Prof. Jianjun Li** China Rehabilitation Research Center
15:45-16:10	Medical-engineering Integration Enhances Precision in Rehabilitation Therap **Prof. Yi Wu** Huashan Hospital Affiliated to Fudan University
16:10-16:35	Design and Development of a Real-time Dynamic Monitoring System for Aspiration Without Cough Reflex **Prof. Zulin Dou** The Third Affiliated Hospital,Sun Yat-Sen University
16:35-17:00	Reflections on the Development of the Assistive Devices Industry in the Context of the New Macroeconomic Situation **Mr. Yuanchang Zheng** National Research Center for Rehabilitation Technical Aids
17:00-17:25	Advances in Neurorehabilitation Technology and International Frontiers **Prof. Dongsheng Xu** Shanghai University of Traditional Chinese Medicine

Technical Session(i-CREATe2024) Virtual Reality and Electromyography Rehabilitation

Session Sponsor: Century Tianhong Int'l Group Share Limited

Session Chair: Prof. Lingling Chen

8/24 13:20-15:20   Pink Diamond Room B/3F

Moderator:	**Prof. Lingling Chen** Hebei University of Technology

13:20-13:45	Intelligent Hand Function Rehabilitation Based on EMG Feedback and Virtual Reality **Prof. Ping Xie** Yanshan University
13:45-14:10	Research on Non-invasive Tactile Feedback Technology for Hand Function Rehabilitation **Prof. Yanjuan Geng** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
14:10-14:35	Enhancing Skill Transfer and Rehabilitation through Soft Robotics Assistance **Prof. Liang He** University of Oxford
14:35-14:55	Electromyography Applications for Motor Rehabilitation with Computerized Interfaces Such as Virtual Reality **Dr. Sophie Dewil** Stevens Institute of Technology
14:55-15:15	Expanding Physiological Sensing for Engineering, Rehabilitation, and Virtual Reality **Ms. Devi De Luca** De Luca Foundation

Technical Session(i-CREATe2024) Intelligent Visual Enhancement and Visual Rehabilitation

Session Chair: Prof. Changbing Huang

8/24 15:30-17:30   Pink Diamond Room B/3F

Moderator:	**Prof. Changbing Huang** Institute of Psychology, Chinese Academy of Sciences, **Prof. Fang Hou** Eye Hospital, Wenzhou Medical University
15:30-15:50	Recent Progress in Tactile Display Devices for the Visual Impaired **Prof. Wenzhen Yang** Zhejiang Lab
15:50-16:10	Visual Function Impairment and Rehabilitation in Patients with Intermittent Exotropia **Prof. Xinping Yu** Zhongshan Ophthalmic Center, Sun Yat-sen University
16:10-16:30	Visual Rehabilitation after Congenital Cataract Surgery **Prof. Qi Wang** Ophthalmology Center, Shandong Provincial Hospital
16:30-16:50	Perceptual learning Improves Spatiotemporal Visual Processing **Prof. Fang Hou** Eye Hospital of Wenzhou Medical University
16:50-17:10	Development and Application of Brain Plasticity Inspired Visual Rehabilitation Techniques **Prof. Changbing Huang** Institute of Psychology, Chinese Academy of Sciences

Technical Session (i-CREATe2024) Digital Rehabilitation Technology

Session Sponsor: BTL Industries Limited.

Session Chair: Prof. Yu Pan

8/24 13:20-15:20   Wedding Palace / 3F

Moderator:	**Prof. Yu Pan** Beijing Tsinghua Changgung Hospital, **Prof. Bin Yang** Tsinghua University
13:20-13:45	Challenges of Structuring Rehabilitation Medicine with Advanced Technology **Prof. Yohei Otaka** Fujita Health University School of Medicine
13:45-14:10	The Latest Progress and Cinical Translation of Digital Medicine and 3D Printing Technology in the Correction of Adolescent Idiopathic Scoliosis **Prof. Jinwu Wang** Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine
14:10-14:35	Study of Brain Stimulation Therapy for the Recovery of Upper Limb Motor Function After Stroke **Prof. Qing Xie** Ruijin Hospital, Shanghai Jiaotong University School of Medicine
14:35-14:55	Exploration of LLM Application in Intelligent Rehabilitation **Prof. Bin Yang** Smart Healthcare Research Center of the institute for Precision Medicine, Tsinghua University
14:55-15:15	Application and Progress of Digital Therapy in Tele-Rehabilitation **Prof. Yu Pan** Beijing Tsinghua Changgung Hospital

Technical Session(i-CREATe2024): Speech and Cognitive Devices

Session Sponsor: Changzhou Qianjing Rehabilitation Co.,Ltd

Session Chair: Prof. Zhuoming Chen

8/24 15:30-17:30   Wedding Palace / 3F

Moderator:	**Prof. Zhuoming Chen** The First Affiliated Hospital of Jinan University
15:30-15:50	Application of Artificial Intelligence in Cognitive-Communicative Rehabilitation **Prof. Zhuoming Chen** The First Affiliated Hospital of Jinan University
15:50-16:10	Application of Multi Sensory Interaction in Inducing Language and Cognitive Improvement in Children **Prof. Langlong Wu** Jiangxi Provincial Children's Hospital
16:10-16:30	Application of Remote Eye Gaze Tracking in Cognitive Rehabilitation **Prof. Aiqun He** Guangdong Work Injury Rehabilitation Hospital
16:30-16:50	Progress in the Application of Brain-computer Interface in the Rehabilitation of Speech Cognitive Dysfunction **Prof. Deqiang Wang** Binzhou Medical University Hospital
16:50-17:10	Application of Rehabilitation Cloud Platform in Assessment and Rehabilitation of Children with Language Disorders **Prof. Aiwen Yi** The Third Affiliated Hospital of Guangzhou Medical University
17:10-17:30	Computer Aided Design for Optimizing Cognitive Function: Exploring Gamified Learning and Training **Prof. Rongliang Hu** Jiangmen Central Hospital

Technical Session (WRRC 2024) Intelligent Upper Limb Prostheses Technology

Session Sponsor: Ottobock (China) Industries Co., Ltd.

Session Chair: Prof. Dingguo Zhang, Prof. Sujiao Li

8/24 13:20-15:20   Ruby Ballroom E / 3F

Moderator:	**Prof. Dingguo Zhang** University of Bath
13:20-13:45	Design and Applications of Soft Neuroprosthetic Hands **Prof. Guoying Gu** Shanghai Jiao Tong University
13:45-14:10	Exploration of Sensory Feedback Methods from Hand to Brain in Prosthetic Hands for Visually Impaired Individuals **Prof. Qirong Tang** Tongji University
14:10-14:35	Multi-motion Pattern Recognition and Virtual Training System of Intelligent Upper Limb Prosthesis **Prof. Sujiao Li** University of Shanghai for Science and Technology
14:35-15:00	Advancements in Intelligent and Dexterous Upper Limb Prosthetic Bionic Control: Key Technologies and Applications Research **Prof. Xiangxin Li** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
15:00-15:20	IMU and 8 HMIs Application on Intelligent Prosthetics Solution **Mr. Qianbo Li** Ottobock (China) Industries Co., Ltd.

Technical Session (WRRC 2024) Intelligent Lower Limb Prostheses Technology

Session Sponsor: Ottobock (China) Industries Co., Ltd.

Session Chair: Prof. Chenglong Fu, Prof. Qiaoling Meng

8/24 15:30-17:30   Ruby Ballroom E / 3F

Moderator	**Prof. Chenglong Fu** Southern University of Science and Technology
15:30-15:55	Predictive Walking with Robotic Powered Transfemoral Prosthesis for Daily Environment **Prof. Chenglong Fu** Southern University of Science and Technology
15:55-16:20	Delay-Inspired Gait Coordination Planning and Control for Intelligent Lower-Limb Prosthesis **Prof. Xiaoxu Zhang** Fudan University
16:20-16:45	Bionic Foot-Ankle Prosthetic Research Based on Human Musculoskeletal Intelligence **Prof. Kunyang Wang** Jilin University
16:45-17:10	Human-Machine Interface and Human Motion Intents Recognition For Robotic Prosthesis **Prof. Enhao Zheng** Institute of Automation, Chinese Academy of Sciences
17:10-17:30	Bionic and Joint Synergistic Motion Control for Hip and Knee Integrated Prostheses **Prof. Chen He** University of Shanghai for Science and Technology

Technical Session (WRRC 2024) Emerging Technologies in Neurorehabilitation Robots

Session Chair: Prof. Weiqun Wang

8/24 13:20-15:20   Ruby Ballroom D / 3F

Moderator	**Prof. Weiqun Wang** Institute of Automation, Chinese Academy of Sciences
13:20-13:45	Research on Non-invasive Motor Imagination Brain-computer Interface and Its Application in Neural Rehabilitation **Prof. Banghua Yang** Shanghai University
13:45-14:10	Myoelectrically-Controlled Rehabilitation Robots for Patients after Stroke **Prof. Rong Song** Sun Yat-sen University
14:10-14:35	Cortical Dynamics and Brain Network Changes During Finger Coordinate Movements: a fNIRS Study **Prof. Le Li** Northwestern Polytechnical University
14:35-15:00	Research on Intelligent Rehabilitation Decision Support for Stroke Critical-care Rehabilitation **Prof. Ziming Yin** Associate Professor University of Shanghai for Science and Technology
15:00-15:20	Isokinetic Strength Training in Rehabilitation Technology for Early-Stage Stroke Patients **Dr. Hao Wu** Memory and Company Ltc.

Technical Session (WRRC 2024) Neural Rehabilitation Robot in Clinical Scenario

Session Sponsor: Shenzhen MileBot Robotics Co.,Ltd.

Session Chair: Prof. Haijie Liu

8/24 15:30-17:30	Ruby Ballroom D / 3F
Moderator	**Prof. Jie Jia** Huashan Hospital Fudan University
	Prof. Lixin Zhang East China University of Science and Technology
15:30-15:55	Data-driven Assistive and Rehabilitation Robotics
	Prof. Wei Tech Ang
	Nanyang Technlogical University
15:55-16:20	Biomarkers in Robotic Neurorehabilitation-opportunities and Challenges
	Prof. Qing Mei Wang
	Harvard Medical School
16:20-16:40	Key Technologies of Wearable Robots for the Elderly and the Disabled
	Prof. Ting Zhang
	Soochow University
16:40-17:00	Research Progress of Lower Limb Exoskeleton Rehabilitation Robot Technology
	Prof. Zhao Guo
	Wuhan University
17:00-17:20	A Preliminary Study on the Concept of Disease-medicine-Prescription-machine-intelligent Holographic Rehabilitation Environment and Its Implementation Path
	Dr. Zhonglei Liu
	Beijing Jiaotong University

Gala Dinner

8/24 18:00-20:30	Diamond Grand Ballroom A-C / 1F

Work Meeting on Technical Committee of Rehabilitation Engineering and Industry Development, Chinese Association of Rehabilitation Medicine(CREID-CARM)

8/24 20:30-21:30	Pink Diamond Room B / 3F

Plenary Speech (i-CREATe 2024)

8/25 08:30-12:00	Diamond Grand Ballroom A / 1F
Moderator:	**Prof. Sunil K. Agrawal** Columbia University in the City of New York
	Prof. Lei Ren Jilin University
08:30-09:00	Social Rehabilitation Network
	Prof. Etienne Burdet
	Imperial College London
09:00-09:30	On the Connotation and Expansion of Assistive Devices
	Prof. Jianan Li
	Nanjing Medical University
09:30-10:00	AI Readiness Toward Aging Society in Thailand
	Prof. Chai Wutiwiwatchai
	NECTEC, Thailand
10:00-10:20	Coffee Break
Moderator:	**Prof. Xilun Ding** Beihang University
	Prof. Shengquan Xie University of Leeds
10:20-10:50	Wearable Assistive Robots for Aging Society
	Prof. Ning Xi
	The University of Hong Kong
10:50-11:20	Looking Ahead: Exciting Developments in Multi-modal Spasticity Management
	Prof. Gerard E. Francisco
	The International Society of Physical and Rehabilitation Medicine (ISPRM)
11:20-11:50	Robotic Prosthetic and Orthotic Devices: Opportunities and Challenges
	Prof. Michael Goldfarb
	Vanderbilt University

Plenary Speech (WRRC 2024)

8/25 08:30-12:10   Diamond Grand Ballroom B / 1F

Moderator:	**Prof. Hongliu Yu** University of Shanghai for Science and Technology
	Prof. Robert Riener ETH Zurich
08:30-09:00	Embodied AI Enhanced Robots for Rehabilitation and Service Tasks
	Prof. Jianwei Zhang
	University Hamburg
09:00-09:30	Witnessing a Wearables Transition for Rehabilitation of Neurological Conditions
	Prof. José L. Pons
	Northwestern University
09:30-10:00	Development of Robotic Guide Dogs for Practical Application
	Prof. Feng Gao
	Shanghai Jiao Tong University
10:00-10:20	Coffee Break
Moderator:	**Prof. Dan Zhang** The Hong Kong Polytechnic University
	Prof. Fuchun Sun Tsinghua University
10:20-10:50	Diarthrodial Joint Models to Enhance Prostheses and Rehabilitation Devices
	Prof. Vincenzo Parenti Castelli
	University of Bologna
10:50-11:20	Force Feedback Teleoperation and its Application in Upper Limb Rehabilitation Robot
	Prof. Aiguo Song
	Southeast University
11:20-12:10	**Round Table Disussion**
Moderator:	**Prof. Jianwei Zhang**
	University Hamburg Foreign Academician of the Chinese Academy of Engineering
	How Intelligent Technology Empowers the Future of Rehabilitation
	Prof. Robert Reiner ETH Zurich
	Prof. Sunil K.Agrawal Columbia University
	Prof. José L. Pons Northwestern University
	Prof. Lei Ren Jilin University
	Prof. Fuchun Sun Tsinghua University
	Prof. Shaoping Bai University of Aalborg University at Denmark

Summit Forum on Wearable Rehabilitation Robotics

Forum Chairs: Prof. Sunil K. Agrawal , Prof. José L. Pons, Prof. Qiaoling Meng

8/25 13:15-17:30   Diamond Grand Ballroom C/ 1F

Moderator:	**Prof. Ping Shi** University of Shanghai for Science and Technology
13:15-13:30	Opening Ceremony
Moderator:	**Prof. Guanglin Li** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences **Prof. Jue Wang** Xi'an Jiaotong University
13:30-13:55	Research and Progress on Intelligent Rehabilitation Limbs **Prof. Fuchun Sun** Tsinghua University
13:55-14:20	Research and Innovations of Wearable Technologies for Human Motion Assistance **Prof. Shaoping Bai** Aalborg University
14:20-14:45	Development and Reflections on Exoskeleton Robotics **Prof. Xinyu Wu** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
14:45-15:10	Key Technology of Wearable Robotics **Prof. Zhijun Li** Tongji University
15:10-15:20	Coffee Break
Moderator:	**Prof. Amy Zavatsky** University of Oxford, Chinese Academy of Sciences
	Prof. Jian Huang Huazhong University of Science and Technology
15:20-15:45	Wearable Soft Robotic for Rehabilitation **Prof. Raymond Kai-yu Tong** The Chinese University of Hong Kong
15:45-16:10	Human-Centered Robots **Porf. Chi Zhu** Shenzhen Technology University
16:10-16:35	A Metaverse for Motor Neurorehabilitation **Prof. Massimo Bergamasco** Scuola Superiore Sant'Anna
16:35-16:55	The health Promotion Effect of Exoskeleton Robot **Prof. Mei Shuai** Beijing AI- robotics Technology Co.,Ltd
16:55-17:20	Research and Development of Wearable Rehabilitation Robots **Prof. Qiaoling Meng** University of Shanghai for Science and Technology

Summit Forum on Elderly Care Technology and Nursing Robots

Sponsor: Shen Zhen Zuowei Technology Co.,Ltd

Forum Chairs: Prof. Bingshan Hu, Prof. Wenwei Yu

8/25 13:15-17:30   Diamond Grand Ballroom A / 1F

Moderator:	**Prof. Bingshan Hu** University of Shanghai for Science and Technology
13:15-13:30	Opening Ceremony
Moderator:	**Prof. Wenwei Yu** Chiba University **Prof. Hongbo Yang** Suzhou Institute of Biomedical Engineering and Technology, Chinese Academy of Sciences
13:30-13:55	BART LAB Medical Robotics Research: Enhancing Elderly Care and Therapeutic **Prof. Jackrit Suthakorn** Mahidol University
13:55-14:20	Localization and Navigation of Intelligent Wheelchair in Dynamic Environments **Prof. Weidong Chen** Shanghai Jiao Tong University
14:20-14:45	Rehabilitation Support Robots and Devices through Medical-engineering Collaboration **Prof. Yoshifumi Morita** Nagoya Institute of Technology
14:45-15:00	New Product Launch Event **Mr. Zhifeng Peng** Shen Zhen Zuowei Technology Co.,Ltd
15:00-15:10	Coffee Break
Moderator:	**Prof. Xiaoyu Zhang** National Rehabilitation and Special Equipment Standardization Technical Committee for the Disabled of SAC **Prof. Shih-Ching** Chen Taiwan Association of Rehabilitation Medicine
15:10-15:35	Development and Evaluation of Individualized Soft Actuators for Hand Rehabilitation **Prof. Wenwei Yu** Chiba University
15:35-16:00	Humanoid Multifunctional Nursing-care Robots, Opportunities and Challenges **Prof. Shijie Guo** Hebei University of Technology
16:00-16:25	Research on Rehabilitation Robots and Their Human-computer Interaction Technology **Prof. Hongbo Wang** Fudan University
16:25-16:50	Characteristics of China's Aging Population and Demand for Home Care **Prof. Lanshu Zhou** Naval Medical University
16:50-17:05	Enhancing the Intelligent Upgrading of 'Ten Assists with One Nursing' Geriatric Rehabilitation Technology **Mr. Yongzheng He** Xiangyu Medical Co., Ltd.

Summit Forum on Intelligent Rehabilitation Engineering and Assistive Products for Traditional Chinese Medicine

Forum Chairs: Prof. Jianguang Xu, Prof. Huayuan Yang

8/25 13:15-16:45   Pink Diamond Room A/3F

13:15-13:30	Opening Ceremony
Moderator:	**Prof. Jianguang Xu** Shanghai University of Traditional Chinese Medicine
13:30-13:55	Invasive vs. Non-invasive, The Crossroads of Brain-computer Interface Industrialization **Prof. Jianguang Xu** Shanghai University of Traditional Chinese Medicine
13:55-14:20	Development Outlook of Chinese Medicine Rehabilitation Equipment **Prof. Xiaodong Feng** Henan University of Chinese Medicine
14:20-14:45	Reflections and Practices of Artificial Intelligence and Chinese Medicine Diagnosis and Treatment Equipment **Prof. Huayuan Yang** Shanghai University of Traditional Chinese Medicine
14:45-15:00	Solution and Application Prospect of Key Technology of Painless Ejection Needle Feeding in Acupuncture **Prof. Pin Wang** Anhui University of Chinese Medicine
15:00-15:10	Coffee Break
Moderator:	**Prof. Huayuan Yang** Shanghai University of Traditional Chinese Medicine
15:10-15:35	Electrical Stimulation for Analgesia Based on the Wrist-Ankle Acupuncture Theory **Prof. Ping Shi** University of Shanghai for Science and Technology
15:35-15:55	Development Status and Prospects of International Standardization in the Field of Traditional Chinese Medicine and Comprehensive Healthcare Services **Prof. Yuandong SHEN** Shuguang Hospital Affiliated to Shanghai University of Traditional Chinese Medicine
15:55-16:20	Application and Innovation of Intelligent Rehabilitation Engineering of Traditional Chinese Medicine in the Treatment of Spinal Cord Injury **Prof. Youjiang Min** Nanchang Medical College
16:20-16:45	Exploring the Application of Chinese Medicine Diagnostic Equipment in Community Recreation Services **Mr. Peihao Zhang** Nahefa Health Technology Co., Ltd.

Technical Session (i-CREATe2024) New Technologies in Intelligent Rehabilitation

Session Chair: Prof. Chunjing Tao

8/25 13:20-15:20   Ruby Ballroom B / 3F

Moderator:	**Prof. Chunjing Tao** Beihang University
	Prof.Jian Li Beijing University of Posts and Telecommunications
13:20-13:45	Gaze-driven Upper Limb Assistive Robotic System
	Prof. Jian Huang
	Huazhong University of Science and Technology
13:45-14:10	Brain-computer Interfaces: Non-invasive or Invasive? Rehabilitation or Assistance?
	Prof. Dingguo Zhang
	University of Bath
14:10-14:35	Current Situation and Development Trend of Rehabilitation Assessment Technology
	Prof. Chunjing Tao
	Beihang University
14:35-14:55	Study on the Intelligent Bath Robot for the Semi-disabled Elderly People
	Prof. Jian Li
	Beijing University of Posts and Telecommunications
14:55-15:20	Intelligent Assistive Diagnosis and Intervention Technology for Pediatric Autism
	Prof. Zhuo Wang
	Hefei Intelligent Robot Institute

Technical Session (i-CREATe 2024) Research and Development of Motor Cognitive Interaction Technology and Equipment

Session Chair: Prof. Zengguang Hou, Prof. Zeping Lv

8/25 15:30-17:40   Ruby Ballroom B / 3F

Moderator:	**Prof. Dongsheng Xu** Shanghai University of Traditional Chinese Medicine
	Prof. Zengyong Li National Research Center for Rehabilitation Technical Aids
15:30-15:50	Promoting Discipline Development by Rehabilitation Quality Control
	Prof. Mouwang Zhou
	Peking University Third Hospital
15:50-16:05	Digitalization and Intellectualization of Human Mortor and Cognitive Function Assessment
	Prof. Wenxin Niu
	Tongji University
16:05-16:20	Characteristics and Neuromodulation Strategies of Cerebral Functional Remodeling in Stroke Patients Based on FNIRS
	Prof. Zengyong Li
	National Research Center for Rehabilitation Technical Aids
16:20-16:35	An Integrated System for Intelligent Assessment and Rehabilitation of Cognitive Dysfunction in the Elderly
	Prof. Hongjun Yang
	Institute of Automantion, Chinese Academy of Sciences
16:35-16:50	Clinical Strategy and Validation of Neural Modulation V3.0
	Prof. Dongsheng Xu
	Shanghai University of Traditional Chinese Medicine
16:50-17:05	Application of MI BCI in Patients of Central Nervous System Injuries
	Prof. Rongrong Lu
	Huashan Hospital affiliated to Fudan University
17:05-17:15	Application of BCI Controlled Robots in Cognitive and Motor Fusion Rehabilitation
	Mr. Luya Li
	Angelexo Scientific Co., Ltd.
17:15-17:25	Integration of Industry, Academia, Research and Application Promotes High-quality Development of Rehabilitation
	Mr. Dengwei Ma
	Xiangyu Medical Co., Ltd.
17:25-17:40	Advances in Eye-Tracking-Based Diagnosis and Intervention Evaluation for Neurodegenerative Diseases
	Mr. Tian Deng
	Chengdu jasmine Technology Co., Ltd.

Technical Session (i-CREATe 2024) Brain Function Detection and Neuromodulation

Session Chair: Prof. Yi Wu

8/25 13:20-15:20   Ruby Ballroom C / 3F

Moderator:	**Dr. Ruiping Hu** Huashan Hospital Affiliated to Fudan University
13:20-13:45	Neuroregulatory Treatment Techniques for Stroke Patients with Hemiplegia **Prof. Yi Wu** Huashan Hospital Affiliated to Fudan University
13:45-14:10	Clinical Effect Evaluation and Neuroplasticity Mechanism Research of Robot-assisted Training to Improve Motor Dysfunction. **Prof. Jian-er Chen** The Third Affiliated Hospital of Zhejiang Chinese Medical University(Affiliated Rehabilitation Hospital)
14:10-14:35	Advancing the Diagnosis and Treatment of Addiction: Identifying and Leveraging Biomarkers through Neurobiological and Artificial Intelligence Approaches **Prof. Di Zhao** Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine
14:35-15:00	Clinical Practice of Vagus Nerve Stimulation for Stoke Patients with Motor Dysfunction **Dr. Yulian Zhu** Huashan Hospital Affiliated to Fudan University
15:00-15:20	The Progress of Mechanism and Neuromodulation for Disorders of Consciousness **Prof. Xuehai Wu** Huashan Hospital Affiliated to Fudan University

Technical Session (i-CREATe 2024) New Technologies in Pediatric Rehabilitation

Session Chair: Prof. Qing Du

8/25 15:30-17:30   Ruby Ballroom C / 3F

Moderator:	**Qing Du** Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medcine
15:30-15:55	Scientific Research Originating from Clinical Problems - Starting from Thermal Therapy for Osteoarthritis: TRPV1&OA **Prof. Dongquan Shi** Nanjing Drum Tower Hospital(The Affiliated Hospital of Nanjing University Medical School)
15:55-16:20	Digital Health Technologies: Reflections in Clinical Practice **Prof. Liebin Zhao** Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medcine
16:20-16:45	Rehabilitation Environment Design and Assistive Device Development for Children **Prof.Lingjing Jin** Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center)
16:45-17:00	Application of Lower Limb Exoskeleton Robot in Children's Rehabilitation **Prof. Nan Chen** Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medcine
17:00-17:15	Research on the Application of Multi-Sensory Integration Virtual Reality Technology in Children's Rehabilitation **Prof. Xiankai Cheng** Suzhou Institute of Biomedical Engineering and Technology
17:15-17:30	Key Factors in Intelligent Cognitive Intervention for Children: Perception, Quantification and Intervention **Prof. Xinlong Jiang** Institute of Computing Technology, Chinese Academy of Sciences

Technical Session (WRRC 2024) New Technologies and Devices in Hand Rehabilitation

Session Chair: Prof. Jie Jia   Prof. Raymond Kai-yu Tong

8/25 13:20-15:20   Ruby Ballroom D / 3F

Moderator:	**Prof. Jie Jia** Huashan Hospital Affiliated to Fudan University
	Prof. Raymond Kai-yu Tong The Chinese University of Hong Kong
13:20-13:45	Transcranial Ultrasound: Clinical Evolution and Evidence from the Periphery to the Center
	Prof. Jie Jia
	Huashan Hospital Affiliated to Fudan University
13:45-14:10	Task-Oriented Training by Electromyography-Driven Soft Robotic Hand in Chronic Stroke: A Randomized Controlled Trial
	Prof. Raymond Kai-yu Tong
	The Chinese University of Hong Kong
14:10-14:35	Functional Brain Networks Assessed with Surface Electroencephalography for Predicting Motor Recovery in a Neural Guided Intervention for Chronic Stroke
	Dr. Rui Sun
	The Hong Kong Polytechnic University
14:35-14:55	Application of Intelligent Technology in Hand Function Rehabilitation
	Mr. Wudong Wang
	Shanghai Siyi Intelligent Technology Co., Ltd.
14:55-15:10	Brain-computer Interface for Stroke Rehabilitation
	Mr. Xiaokang Shu
	Shanghai Niantong Intelligence Technology Co. Ltd.

Technical Session (i-CREATe 2024) Intelligent Adaptation Technology for Assistive Devices

Session Chair: Prof. Liquan Dong Prof. Sujiao Li

8/25 15:30-17:45   Ruby Ballroom D / 3F

Moderator:	**Prof. Liquan Dong** China Assistive Devices and Technology Center for Persons with Disabilities
	Prof. Sujiao Li University of Shanghai for Science and Technology
15:30-15:45	Opening Ceremony
15:45-16:10	Application of Information Technology in Asisstive Products Services
	Prof. Liquan Dong
	China Assistive Devices and Technology Center for Persons with Disabilities
16:10-16:30	Intelligent Evaluation of Limb Functional Disorders and Adaptation of Assistive Devices Based on Internet
	Prof. Jin Xu
	Xi'an Jiaotong University
16:30-16:50	Advancements in Assistive Technology for the Visually Impaired
	Prof. Jianmin Hu
	The Second Affiliated Hospital of Fujian Medical University
16:50-17:10	Artificial Intelligence Scene Requirements Based on the Practice of Listening Services at the Grass-roots Level
	Prof. Wei Liang
	China Rehabilitation Research Center for Hearing and Speech Impairment
17:10-17:30	Research and Application of Information Accessibility Technology
	Mr. Wei Wang
	Zhejiang University
17:30-17:45	Construction and Application of Internet Based Assistive Technology Service Platform
	Mr. Ping Song
	Shanghai Welfare Information Technology Co., Ltd

Technical Session (WRRC 2024) Exoskeleton Robotics Technology

Session Chair: Prof. Shaoping Bai, Prof. Ting Zhang

8/25 13:20-15:20 　　　　Ruby Ballroom E / 3F

Moderator:	**Prof. Ting Zhang** Soochow University

13:20-13:40	Modular Design of Wearable Robotics for Rehabilitation
	Prof. Haoyong Yu
	National University of Singapore
13:40-14:00	Exoskeleton Robot Technology for Rehabilitation
	Prof. Xingang Zhao
	Shenyang Institute of Automation Chinese Academy of Sciences
14:00-14:20	The Application and Exploration of Upper Limb Rehabilitation Robotics
	Prof. Chunxiao Wan
	Tianjin Medical University General Hospital
14:20-14:40	Human-robot Interaction and Motion Generalization of Lower Limb Rehabilitation Exoskeleton Robot
	Prof. Wuxiang Zhang
	Beihang University
14:40-15:00	Very Early Rehabilitation-stroke Unit: A New Model Based AI
	Prof. Haijie Liu
	Xuanwu Hospital Capital Medical University
15:00-15:20	Exoskeleton and Intelligent Control System Application on Industry and Rehabilitation
	Mr. Qianbo Li
	Ottobock (China) Industries Co., Ltd.

Technical Session (i-CREATe 2024) Forum on Intelligent Medical Care and Elderly Care Integration

Session Chair: Prof. Pengyuan Zheng

8/25 15:30-17:30 　　　　Ruby Ballroom E / 3F

Moderator:	**Prof. Pengyuan Zheng**
	Henan Academy of Medical Sciences Institute of Rehabilitation Medicine

15:30-16:00	Construction and Practice of Whole Chain Intelligent Medical and Elderly Care Integration Model
	Prof. Pengyuan Zheng
	Henan Academy of Medical Sciences Institute of Rehabilitation Medicine
16:00-16:30	Wisdom Leader Ship: Exploration and Application of the Six-in-One Healthcare Integration Service Model
	Prof. Zonghui Wu
	Southwest University
16:30-17:00	Construction and Application of the Traditional Chinese Medicine Proactive Health Intelligent Integrated Eldercare Services with Medical Care Model
	Prof. Zhengtang Liu
	Xiyuan Hospital of China Academy of Chinese Medical Sciences
17:00-17:30	Analysis of the current situation of the combination of medical care needs for the elderly in the home or community
	Prof. Qiangsan Sun
	The Second Hospital of Shandong University

The 2nd International Summit Forum on the Development of Rehabilitation Equipment Industry

Sponsors: USST National Science Park, Shanghai Yangpu Science and Technology Innovation Group(SYSTIG)

Session Chair: Prof. Hongliu Yu, Dr. Sarun Sumriddetchkajorn

8/26 08:20-12:30	Diamond Grand Ballroom A / 1F
Moderator:	**Prof. Sujiao Li** University of Shanghai for Science and Technology
08:20-08:50	Address by Leaders
Moderator:	**Prof. Evert-Jan** Hoogerwerf Association for the Advancement of Assistive Technology in Europe (AAATE)
	Prof. Sujiao Li University of Shanghai for Science and Technology
08:50-09:10	Living with Functional Limitations in Technologizing World: Opportunities, Threats and Challenges
	Prof. Luc DE Witte
	Chair, Global Alliance of Assistive Technology Organizations
09:10-09:30	Thoughts on Fusion of Assistive Devices and New Technology Innovation
	Mr. Deming Kong
	Director, China Assistive Devices and Technology Center for Persons with Disablties
09:30-09:50	The State-of-the-art of Development of Assistive Product Industry in Shanghai
	Dr. Xiaohong Sun
	Shanghai Civil Affairs Bureau
09:50-10:10	State-of-the-art Standards in Rehabilitation Robots
	Prof. Inhyuk Moon
	Dong-Eui University
10:10-10:20	Coffee Break
Moderator:	**Dr. Simon Wong** Coalition of Rehabilitation Engineering and Assistive Technology of Asia(CREATe Asia)
	Dr. Yuling Zhang University of Shanghai for Science and Technology
10:20-10:40	Rehabilitation Industry and Investment in Thailand
	Dr. Sarun Sumriddetchkajorn
	Coalition of Rehabilitation Engineering and Assistive Technology of Asia(CREATe Asia)
10:40-11:00	Empowering Rehabilitation: The Role of Assistive Technologies
	Prof. Ta-Sen Wei
	Taiwan Rehabilitation Engineering and Assistive Technology Society
11:00-11:20	The State of the Art of Development of Nursing Care Robots in Japan by 2024
	Prof. Yuichiro Honda
	Osaka-Sangyo University
11:20-12:10	Roundtable Forum on Assistive Products Industry
Moderator:	**Prof. Wei Tech Ang** Society of Rehabilitation Medicine (Singapore)
	Prof. Luc DE Witte Global Alliance of Assistive Technology Organizations
	Mr. Deming Kong China Assistive Devices and Technology Center for Persons with Disablities
	Mr. Yongzheng He Xiangyu Medical Co.,Ltd
	Prof. Mei Shuai Beijing AI- robotics Technology Co.,Ltd
	Mr. Jinqiu Xing Guangzhou Yikang Medical Equipment Co.,Ltd
	Mr. Tianrun Fan Changzhou Qianjing Rehabilitation Co.,Ltd

Technical Session (WRRC 2024) Intelligent Walking Assistant Robot

Session Chair: Prof. Zhi Lan

8/26 08:20-10:20	Ruby Ballroom B / 3F

Moderator:	**Prof. Zhi Lan** National Research Center for Rehabilitation Technical Aids
08:20-08:45	Intelligent Driving Technologies and Applications for Electric Wheelchair **Prof. Xucheng Yin** University of Science and Technology Beijing
08:45-09:10	Compliant Mechanisms and Rigid-Compliant-Soft Integrated Robots **Prof. Guimin Chen** Xi'an Jiaotong University
09:10-09:35	Wearable Centaur Load-carrying Walking Robot **Prof. Chenglong Fu** Southern University of Science and Technology
Moderator:	**Prof. Qiang Wang** National Research Center for Rehabilitation Technical Aids
09:35-09:55	CP-Gait-Walker: Robotic Platform with Hybrid Mechanism for Gait Rehabilitation in Patients with Cerebral Palsy Towards Long-term Applications **Prof. Wenyuan Liang** National Research Center for Rehabilitation Technical Aids
09:55-10:15	Human-machine Interaction for Motion Rehabilitation Based on Flexible Neuromuscular Interface **Prof. Lin Wang** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences

Technical Session (WRRC 2024) Intelligent Nursing Technology for the Bedridden Elderly

Session Chair: Prof. Ping Shi

8/26 10:30-12:30	Ruby Ballroom B / 3F

Moderator:	**Prof. Yanchen Du** University of Shanghai for Science and Technology
10:30-10:35	Opening Ceremony
10:35-10:55	Key Technologies and Integration Applications of Intelligent In-bed Care Robot System **Prof. Chuizhou Meng** Hebei University of Technology
10:55-11:15	Intelligent Rehabilitation Nursing Robot System for Bedridden Disabled Elderly Care **Prof. Bingshan Hu** University of Shanghai for Science and Technology
11:15-11:35	Progress in Intelligent Rehabilitation Nursing Technology **Prof. Xia Bi** Shanghai Health Medical College Affiliated Zhoupu Hospital
11:35-11:55	Artificial Intelligence Technologies for Unobtrusive and Continuous Monitoring of Disabled Older Adults **Prof. Jingjing Luo** Fudan University
11:55-12:15	Digital Inclusion **Mr. Torpong Selanon** The National Broadcasting and Telecommunications Commission of Thailand (NBTC)
12:15-12:35	Application of Smart Bed - Chair Robots **Prof. Rong Xiao** Shanghai Xuankang Robotics Co., Ltd.

Technical Session (i-CREATe 2024) Rehabilitation Engineering and Industrial Design

Session Chair: Prof. Tao Chen

8/26 08:30-10:30   Ruby Ballroom C / 3F

Moderator:	**Prof. Tao Chen** University of Shanghai for Science and Technology
08:30-08:40	Opening Ceremony
08:40-08:45	Address by leader from China Industrial Design Association **Prof. Zhan Zhang** China Industrial Design Association
08:45-09:05	Design Lnnovative Driving in the Robotic Companies **Mr. Chung Kin Wong** Shanghai Kepler Exploration Robot Co., Ltd.
09:05-09:25	Key Technologies and Innovative Design for Active Health in Human-Machine Convergent Intelligence **Prof. Ting Han** Shanghai Jiao Tong University
09:25-09:45	Synergy and Evolution of Design **Prof. Wei Ding** East China University of Science and Technology
09:45-10:05	Product Innovation Driven by Design **Prof. Chenye Lin** Shanghai Blue Industry Design CO., LTD.
10:05-10:30	Panel Discussion **Prof. Tao Chen** University of Shanghai for Science and Technology **Prof. Jiang Xu** Tongji University **Prof. Wei Yu** East China University of Science and Technology **Prof. Chunmao Wu** Donghua University **Dr. Yan Zhang** BIGSimulo Smart Product Simulation Platform

Technical Session (i-CREATe 2024) Biomechanics in Rehabilitation Engineering

Session Chair: Prof. Wenming Chen，Prof. Wenxin Niu

8/26 10:30-12:30   Ruby Ballroom C / 3F

Moderator:	**Prof. Wenxin Niu** Tongji University, **Prof. Jia Yu** Soochow University
10:30-10:50	How Can Multi-segment Foot Models Used in Gait Analysis Inform Prosthetic Foot Design? **Prof. Amy Zavatsky** University of Oxford
10:50-11:10	Innovative Design of Medical Implant **Prof. Lizhen Wang** Beihang University
11:10-11:30	Biomechanics Study of Visual Cues Intervention for Gait Disorders in Parkinson's Disease **Prof. Dongyun Gu** Shanghai Ninth People's Hospital of Shanghai Jiao Tong University School of Medicine
11:30-11:50	The Biomechanical Study of Chronic Ankle Instability on Lower Limb Joint Degeneration **Prof. Jia Yu** Soochow University
11:50-12:10	Development of Intelligent System for Spinal Cord Injury Rehabilitation Based on Biomechanics **Prof. Wenxin Niu** Tongji University
12:10-12:30	Cloud Pattern Technology and Clinical Applications in Spinal Biomechanics **Mr. Guohua Liu** Xinkang Biomedical Technology (Hangzhou) Co., Ltd

Technical Session(i-CREATe 2024) Youth Scientist Forum on Rehabilitation Engineering

Session Chairs: Prof. Jingxin Wang, Prof. Wujing Cao

8/26 08:20-10:20   Ruby Ballroom D / 3F

Moderator:	**Prof. Jingxin Wang** Zhengzhou University Affiliated Zhengzhou Central Hospital **Prof. Wujing Cao** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
08:20-08:40	The Current Development Status of Rehabilitation Engineering and Assistive Technology **Prof. Jingxin Wang** Zhengzhou University Affiliated Zhengzhou Central Hospital
08:40-09:00	Orthopedic Rehabilitation Robot for Post-surgery Treatment of Lower Limb **Prof. Tao Sun** Tianjin University
09:00-09:20	Magnetically Controlled Microrobotic System for Vascular Interventional Surgery **Prof. Tiantian Xu** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
09:20-09:40	Constructing Interactive Thinking in Medicine and Engineering Based on Community Health Practice **Prof. Hegao Yu** The Eighth Affiliated Hospital Sun Yat-Sen University
09:40-10:00	Intelligent Task-oriented Rehabilitation Robots **Prof. Mingming Zhang** Southern University of Science and Technology
10:00-10:20	Exploring the Solution of Iatrogenic Peripheral Nerve Injuries **Dr. Heng Xu** Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine

Technical Session (i-CREATe 2024) Brain-computer Interface and Rehabilitation Engineering

Session Chair: Prof. Jing Jin, Prof. Banghua Yang

8/26 10:30-12:30   Ruby Ballroom D / 3F

Moderator:	**Prof. Jing Jin** East China University of Science and Technology, **Prof. Banghua Yang** Shanghai University
10:30-10:50	Rehabilitation of Motor and Speech Function After Stroke Using Brain-computer Interfaces **Prof. Gerwin Schalk** Fudan University
10:50-11:10	Brain-Computer Interface Technology and Its Applications in Rehabilitation Medicine **Prof. Jing Jin** East China University of Science and Technology
11:10-11:30	Applications of New MRI Techniques in the Evaluation of Brain Diseases **Prof. He Wang** Fudan University
11:30-11:50	The Exploration and Practice of the Combination of Medical Work in the Department of Neurological Rehabilitation **Prof. Yan Zhu** Shanghai Second Rehabilitation Hospital
11:50-12:10	The Neuromodulation Effects and Applications of Transcranial Ultrasound Stimulation **Prof. Junfeng Sun** Shanghai Jiao Tong University
12:10-12:30	A Model-based Brain Switch via Periodic Brain Rhythm Modulation for Asynchronous Brain-Computer Interfaces **Prof. Jianjun Meng** Shanghai Jiao Tong University

Technical Session (WRRC 2024) Human-Machine Collaboration in Rehabilitation Robot

Session Chair: Prof. Ningbo Yu , Prof. Weiwei Wan

8/26 08:20-10:20   Ruby Ballroom E / 3F

Moderator:	**Prof. Ningbo Yu** Nankai University
08:20-08:45	Key Technologies and Applications of Human-robot Interaction in Hand Exoskeleton **Prof. Long Cheng** Institute of Automantion, Chinese Academy of Sciences
08:45-09:10	Intelligent Human Machine Interaction for Precision Neurorehabilitation **Prof. Chong Li** Tsinghua University
09:10-09:35	Human-centered Assistive Control of Lower Limb Exoskeletons **Prof. Weiguang Huo** Nankai University
09:35-10:00	Robot-assisted Ankle Rehabilitation Training and Intelligent Assessment **Prof. Mingjie Dong** Beijing University of Technology
10:00-10:25	On the Human-machine Interactive Control Method of Lower Limb Rehabilitation Robot for Stroke Patients **Prof. Zhongbo Sun** Changchun University of Technology

Technical Session (WRRC 2024) Intelligent Wearable Technology

Session Chair: Prof. Hongbo Yang

8/26 10:30-12:30   Ruby Ballroom E / 3F

Moderator:	**Prof. Hongbo Yang** Suzhou Institute of Biomedical Engineering and Technology, CAS
10:30-11:00	Stretchable and Flexible Electronic Devices Based on Functional Thin Film Materials **Prof. Yuan Lin** University of Electronic Science and Technology of China
11:00-11:30	Wearable Iontronic Devices for Medical-Grade Theranostics **Prof.Tingrui Pan** University of Science and Technology of China
11:30-12:00	Flexible Sensors and Smart Applications **Prof. Ranran Wang** Shanghai Institute of Ceramics, Chinese Academy of Sciences
12:00-12:30	Carbon-based Flexible Tactile Sensor Devices and Their Applications in Health **Prof. Dapeng Wei** Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences

Technical Session (WRRC 2024) Innovative Design and Application of Rehabilitation Robot

Session Chair: Prof.Yoshifumi Morita, Dr. Hongyan Tang

8/26 13:00-15:00   Ruby Ballroom B / 3F

Moderator:	**Prof. Yoshifumi Morita** Nagoya Institute of Technology **Dr. Hongyan Tang** University of Shanghai for Science and Technology
13:00-13:10	Exoskeleton-based Lower Limb Rehabilitation Robot Design and Simulation for Children with Cerebral Palsy **Wujing Cao** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
13:10-13:20	New Generation Wearable Ankle Rehabilitation Robot **Hongyan Tang** University of Shanghai for Science and Technology
13:20-13:30	Design and Analysis of Multi-Posture Electric Wheelchair **Lan Zhi** Hebei University of Technology
13:30-13:40	Development of a Soft Hand and Wrist Rehabilitation Robot Utilizing Dot-Matrix Structure Actuators **Jianwei Lai** Southeast University
13:40-13:50	Upper Limb Rehabilitation Device Based on Adaptive Lmpedance Control **Lingyan Hu** Shanghai University of Engineering Science
13:50-14:00	Design and Analysis of a Mobile Suspension Rehabilitation Robot **Fei Wang** Ningbo University
14:00-14:10	Conceptual Design and Preliminary Experiment of an Orthopedic Rehabilitation Exoskeleton Based on the Coupled Movable Pulley Mechanism (CMPM) **Xingbang Yang** Beihang University
14:10-14:20	Design and Research of a 6-Degree-of-Freedom Parallel Ankle Rehabilitation Robot Based on Compliant Spherical Joints **Haiyang Li** Dlian University of Technology
14:20-14:30	Development of a Novel and Cost-Effective Meal Assistance Robot for Self-Feeding **Hongliu Yu** University of Shanghai for Science and Technology
14:30-14:40	Motion Comfort Study of Mecanum Wheel Based Intelligent Nursing Robot **Huang Pu** University of Shanghai for Science and Technology
14:40-14:50	Development of an EMG-controlled Hand Rehabilitation Exoskeleton with Series Elastic Actuators **Qingcong Wu** Nanjing University of Aeronautics and Astronautics
14:50-15:00	A Multi-wavelength Photoplethysmography-based Patch Physiological Monitoring System: Design and Functional Validation **Wang Shuo** Fudan University

Technical Session (WRRC 2024) Intelligent Rehabilitation and Motion Monitoring

Session Chairs: Prof. Jackrit Suthakorn, Prof. Wujing Cao

8/26 13:00-15:00   Ruby Ballroom C / 3F

Moderator:	**Prof. Jackrit Suthakorn** Mahidol University **Prof. Wujing Cao** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
13:00-13:10	EMG Based Rehabilitation Gesture Recognition Using DAE-CNN-LSTM Hybrid Model **Xinqiang Guo** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
13:10-13:20	Robust Command-Filtered Control of Compliant Actuator-Driven Robotic Manipulators by Employing Beneficial Disturbances **Fuxin Du** Shandong University
13:20-13:30	Effect of Haptic Perception Rehabilitation Robot Training on Hand Grasping Function after Stroke **Yawen Lian** The First Bethune Hospital of Jilin University
13:30-13:40	Design and Validation of an Inertial Motion Capture System for Human Dynamic Balance Assessment **Bingfei Fan** Zhejiang University of Technology
13:40-13:50	Research on the Design and Evaluation of Virtual Driving Simulator Product Based on KE-FAHP **Xiaorou Dai, Dehui Ye** Guilin University Of Electronic Technology
13:50-14:00	A Clinical Pathway Model for Severe Stroke Rehabilitation based on Process Mining **Mengqi Li** University of Shanghai for Science and Technology
14:00-14:10	A Study on Finger Grasping Action Classification Based on Multimodal Fusion **Yindi Wang** Northeast Forestry University
14:10-14:20	Hand Landmark Detection Approach for the Personalized Soft Wearable Robotic Hand on Post-Stroke Hand **Sumedha Saxena** Hong Kong Chinese University
14:20-14:30	Cosine Similarity Graph Attention Networks for Autism Spectrum Disorder Diagnosis **Yihang Zhang** Hangzhou Dianzi University
14:30-14:40	Quantitative Assessment of Lower Limb Spasticity Using sEMG Data and Bayesian-optimised SVM **Tianzhe Bao** University of Health and Rehabilitation Sciences
14:40-14:50	Natural hydrogel-based flexible electronic skin for wound healing and motion monitoring **Wang Ranran** Binzhou Medical University
14:50-15:00	Introduction and Interaction Creation of Communication Robots in Care Facilities A Comparison of China, Taiwan, and Japan **Zhang Yue** Shizuoka University

Technical Session (i-CREATe 2024) Intelligent Rehabilitation and Assistive Technology

Session Chair: Prof. Inhyuk Moon, Prof. Yuquan Leng

8/26 13:00-15:00   Ruby Ballroom D / 3F

Moderator:	**Prof. Inhyuk Moon** Dong-Eui University
	Prof. Yuquan Leng Southern University of Science and Technology
13:00-13:06	Design and Experiment of a Compact Intelligent Mobile Rehabilitation Exoskeleton Robot for Children with Cerebral Palsy Aged 3 to 6 Years **Yuantao Ding** Shanghai Jiao Tong University
13:06-13:12	Performance Validation of Joint Modular Soft Actuators for Finger Joint Stiffness Estimation **Wenwei Yu** Chiba University
13:12-13:18	Eating-assistive Robotic System with Autonomous Feeding Framework and Active Compliance Control **Diansheng Chen** Beihang University
13:18-13:24	Study of a Novel Soft Robotic Actuator for Hand Hehabilitation **Wanting Hu** Hefei University of Technology
13:24-13:30	Effects of Sensorimotor-integrated (SMI) Wrist/hand Rehabilitation Assisted by a Hybrid Soft Robot Poststroke **Legeng Lin** The Hong Kong Polytechnic University
13:30-13:36	Research on Rehabilitation Exercise Guidance System based on Action Quality Assessment **Sun Jingwei** Tsinghua University
13:36-13:42	Development of an FEM model of a Spherical Dummy Joint-Soft Actuator Complex for Evaluation of Soft Actuators **Wenwei Yu** Chiba University
13:42-13:48	Design and Development of a Wrist-Hand Integrated Rehabilitation Robot with Human-Machine Interaction System **Xijin Sun** Shandong University
13:48-13:54	Upper Limb Functional Electrical Stimulation Rehabilitation System with the Patient's Active Participation **Lingyan Hu** Shanghai University of Engineering Science
13:54-14:00	An Upper Limb Rehabilitation Device Based on Functional Electrical Stimulation **Lingyan Hu** Shanghai University of Engineering Science
14:00-14:06	Motion Retargeting Using Graph Neural Network for Vision-Guided Dexterous Robot Teleoperation **Yuanchuan Lai** Sun Yat-sen University
14:06-14:12	Hypertension Identification System for Stroke Patients Based on Photoplethysmography Device **Bo Sheng** Shanghai University
14:12-14:18	Development of a Personalized and Portable Ear-EEG Recording System for Enhanced Biopotential Measurements **Apit Hemakom** NECTEC, Thailand
14:18-14:24	Humanization Evaluation of Shower Wheelchairs in Eldercare Facilities **Kangjie Zheng** Southern University of Science and Technology
14:24-14:30	A Soft Pneumatic Hip-Assistive Robot for Reducing Scissor Gait on a Five-Year Old Child with Cerebral Palsy **Kai-yu Tong** Hong Kong Chinese University
14:30-14:36	A Real-Time Acceleration-Based Frailty Detection System for Elderly Care **Watsawee Sansrimahachai** University of The Thai Chamber of Commerce
14:36-14:42	Design of a Self-locking Component for McKibben Muscle Back-stretchablility **Shuai Mao** University of Oxford
14:42-14:48	Navigation route planning for visually impaired people based on Ultra Wideband indoor positioning system **Yuexin Li** East China Normal University
14:48-14:54	BART LAB AI Elderly Support Robot for Enhanced Biomechanical Assistance in Sit-to-Stand and Walking Activities **Jackrit Suthakorn** Mahidol University
14:54-15:00	Advancing Mobility in Stair Climbing with BART LAB's Intelligent Wheelchair: A Deep Learning Approach to Pose Estimation **Jackrit Suthakorn** Mahidol University

Technical Session (i-CREATe 2024) Innovative Neurorehabilitation technology

Session Chair: Prof. Peng Li, Prof. Duojin Wang

8/26 13:00-15:00   Ruby Ballroom E / 3F

Moderator:	**Prof. Peng Li** Harbin Institute of Technology (Shenzhen)
	Prof. Duojin Wang University of Shanghai for Science and Technology
13:00-13:06	Virtual Co-embodiment Rehabilitation An Innovative Method Integrating Virtual Co-embodiment and Action Observation Therapy in Virtual Reality Rehabilitation **Chengjie Zhang** Shanghai Jiao Tong University
13:06-13:12	The Efficacy of Foot Orthosis in Relieving Foot Pain Caused by Rheumatoid Arthritis **Chunjing Tao** Beihang University
13:12-13:18	Effect of Visual Feedback Task-oriented Training System on Post-stroke Pusher Syndrome **Haoyang Duan** The First Bethune Hospital of Jilin University
13:18-13:24	Study on Risk Level of Choking Events in Psychiatric Elderly Adults **Yongli Wei** Qingdao Mental Health Center
13:24-13:30	The Clinical Efficacy of Dynamic Balance Training Instrument in the Treatment of Pusher Syndrome after Stroke **Wendong Yang** The First Bethune Hospital of Jilin University
13:30-13:36	Impact of Iwakka Training on Cerebral Blood Flow and Hand Function in Stroke Patients with Left Hemiplegia **Runhong Yao** Nihon Institute of Medical Science
13:36-13:42	fNIRS-based Graph Frequency Analysis Quantified the Effect of Dopaminergic Medication on Gait in Parkinson's Disease **Xinyuan Zhang** Nankai University
13:42-13:48	The Influence of Early Weight-Bearing Training with Real-Time Supervision on Postoperative Rehabilitation of Tibial Shaft Fractures: Case Series Report **Mingxia Gong** Beihang University
13:48-13:54	Repetitive Passive Movement Modulates Cortical Dynamics in Subacute Stroke Patients with Sensory Deficits **Jingyao Sun** Tsinghua University
13:54-14:00	Effect of Botulinum toxin type A on EMG-based motion detection: a pilot study on post-stroke patients **Zhiyuan Lu** University of Health and Rehabilitation Sciences
14:00-14:06	Brain Rhythmic Activity and Hemodynamic Response During Wrist Extension Induced by Functional Electrical Stimulation **He Mao** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
14:06-14:12	To Adapt Waveforms of Transcutaneous Electrical Stimulation for Effective Relief of Chronic Pain **Wenwei Yu** Chiba University
14:12-14:18	Reorganization of Undirected and Directed Cortico-muscular Connectivity after Exoneuromusculoskeleton-assisted Poststroke Telerehabilitation **Wanyi Qing** The Hong Kong Polytechnic University
14:18-14:24	A fNIRS Study of Brain Activation in Stroke Patients under Three Different Walking Modes **Tao Qin** Hubei University of Arts and Science
14:24-14:30	A Segment Anything Model for Automated Intracranial Aneurysm Segmentation in Computed Tomography Angiography Images **Sirapop Nakhawatchana** Mahidol University
14:30-14:36	A Risk Prediction System Based on Machine Learning for Acute Ischemic Stroke in Patients With Atrial Fibrillation **Mengyao Jin** Hainan University
14:36-14:42	EEG-Based Assessment of Bilateral Brain Activation Comparison and Hand Functional Improvement using Virtual Reality Mirror Therapy Combined with Robot-Assisted Upper Limb Intervention **Che-Wei Lin** National Cheng Kung University
14:42-14:48	Study on the Effectiveness of Focused Microwave Stimulation in Improving Motor Dysfunction in Stroke Rats **Sinan Li** Xi'an Jiaotong University
14:48-14:54	A Primary Study on Ipsilateral Motor Cortex Activation during Unilateral Hand Movements Using EEG-fNIRS-sEMG **Sihong Wei** Xi'an Jiaotong University
14:54-15:00	Localization of the Upper Extremity Area on the Primary Motor Cortex with Transcranial Magnetic Stimulation Figure-of-Eight Coil for Motor Rehabilitation: A Clinical Study **Jackrit Suthakorn** Mahidol University

Technical Session (i-CREATe 2024) Intelligent Human Motion Analysis and Assistive Technology

Session Chair: Prof. Chunjing Tao, Prof. Liang He

8/26 13:00-15:00   Diamond Grand Ballroom A / 1F

Moderator:	**Prof. Chunjing Tao** Beihang University
	Prof. Liang He University of Oxford
13:00-13:06	A Pilot Study on Quantitative Muscle Strength Assessment Using EMG and Motion Data **Zhengtao Wang** Shanghai Jiao Tong University
13:06-13:12	Effect of Different Soft Knee Braces on Quadriceps and Hamstring Activity During Running **Xueying Zhang** Beihang University
13:12-13:18	Feature Fusion of Gramian Angular Field Deep Learning EEG-Based Epileptic Seizure Classification **Shixiong Chen** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
13:18-13:24	Advances in sensory feedback based on transcutaneous electrical stimulation **Shuaishuai Qin** University of Shanghai for Science and Technology
13:24-13:30	Dynamic Stability Analysis of Walking on Flat Ground and over Obstacles in Different Groups **Xing Gao** Beijing Research Institute of Science and Technology
13:30-13:36	Dynamic Three-Dimensional Spinal Model Based on Biological Anatomy Mechanisms **Mingjie Dong** Beijing University of Technology
13:36-13:42	The Potential of Seat Shaking for Balance Improvement in Older Adult **Runhong Yao** Nihon institute of Medical Science
13:42-13:48	A Novel Gamified Approach for Collecting Speech Data from Young Children with Dysarthria: Feasibility and Positive Engagement Evaluation **Naixin Liu** Shanghai Jiao Tong University
13:48-13:54	Toward Improving the Performance of Hand Movement Intention Recognition for Upper Limb Amputees Using Flexible Ultrasound Transducers **Xiangxin Li** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
13:54-14:00	Clinical Research on the Method of Measuring Respiratory Cycle Based on Inertial Measurement Units **Yongli Wu** Nanjing Medical University
14:00-14:06	A Preliminary Investigation into the Effects of different mobility aids on the Kinematics of the Trunk and Pelvis in the Elderly **Yanyu Zhang** Beihang University
14:06-14:12	A Design of Multi-brain Region Electrical Stimulation System Based on Real-time Feedback Regulation Online for Neuromodulation Therapy **Shuangqin Wang** Shanghai University of Traditional Chinese Medicine
14:12-14:18	Analysis of Finger Motions for Assisting Spoon Scooping with Soft Actuators **Wenwei Yu** Chiba University
14:18-14:24	Feature Selection and Machine Learning for Online Upper Limb Spasticity Detection **Ye Li** Southeast University
14:24-14:30	Human Behavior Recognition Based on Weighted Voting - Dempster Shafer Algorithm from Fusion of Multiple Radar **Shaohong Wang** Shanghai Jiao Tong University
14:30-14:36	Development of Tailor-Made Task Selection Algorithm to Maintain Motivation in iWakka Healthcare System **Linh Thi Thuy Pham** Nagoya Institute of Technology
14:36-14:42	Finger-wrist Gesture Recognition based on Surface Electromyography and Inertial Signals **Bin Wen** Xi'an Jiaotong University
14:42-14:48	Navigation Route Planning for Visually Impaired People Based on Ultra Wideband Indoor Positioning System **Yuexin Li** East China Normal University
14:48-14:54	Posture Lab: Quantifying Sitting/Standing Posture with Computer Vision and Wearable Sensors **Supachai Vorapojpisut** Thammasat University
14:54-15:00	Innovative Rehabilitation Game for Stroke Patients with Augmented Reality **jie Sun** Xi'an Jiaotong-Liverpool University
15:00-15:06	Low Noise, Low Input Capacitance Neural Recording Analog Front end For Human Machine Interface **Yishan Wang** Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences

CREATe Asia General Assembly Meeting

8/26 13:00-14:00   Pink Diamond Room A/3F

Founding Meeting of Technical Committee of Rehabilitation Robots under Shanghai Rehabilitation Device Association

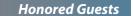8/26 14:00-15:00   Pink Diamond Room A/3F

Plenary Speech & Closing Ceremony

8/26 15:00-17:00   Diamond Grand Ballroom A / 1F

Moderator:	**Prof. Jianguang Xu** Shanghai University of Traditional Chinese Medicine
	Prof. Wei Tech Ang Nanyang Technlogical University
15:00-15:30	Intelligent Robotics Empower Future Rehabilitation
	Prof. Lining Sun
	Soochow University
15:30-16:00	Reflection and Exploration on Rehabilitation Training Models and Laws in the Era of General Artificial Intelligence
	Prof. Zhifeng Hao
	Shantou University
16:00-16:40	Closing Ceremony

Hongliu Yu

Prof.Hongliu Yu is the director of Institute of Intelligent Rehabilitation Engineering at the University of Shanghai for Science and Technology(USST) and the director of Shanghai Engineering Research Center of Assistive Devices(SERCAD). He received his bachelor's degree in the Department of Electrical Engineering from Huazhong University of Science and Technology (HUST) in 1987, master's degree in the Department of Mechanical Engineering from Zhengzhou University(ZZU) in 1990, and Ph.D. in the department of Industrial Engineering from USST in 2009 with the research in the field of intelligent rehabilitation robotics. He established the world's first rehabilitation engineering major, hosted over 50 national, provincial, and industry cooperative research projects, and serves as the chief expert for research project of National Key Research and Development Program of China. Prof. Yu has published more than 380 journal papers and received six provincial and ministerial-level scientific and technological awards. His team has completed over 10 government consulting reports on the assistive product industry in Shanghai and China. He holds the global record for the number of patents in rehabilitation engineering technology among universities and research institutions (WIPO Statistics 2021), with over 20 patents commercialized, making him one of the most influential scholars in the field. He also won the China Innovation Award for Industry-University-Research Cooperation. He founded the first rehabilitation engineering journal 《World Rehabilitation Engineering and Devices》 in China. He initiated numerous academic and industrial conferences, including the World Rehabilitation Robot Convention(WRRC), China Rehabilitation Robot Conference(RRC), China Rehabilitation Industry and Development Forum, and Shanghai Rehabilitation Engineering Forum,etc. As the general chair, he hosted i-CREATe 2018 which was the largest conference in rehabilitation engineering worldwide. He also serves as the founding presidents and chairs of various prestigious committees, including the Rehabilitation Robot Alliance, the Technical Committee of Rehabilitation Engineering and Industry Development under the Chinese Association of Rehabilitation Medicine, the Professional Committee of Rehabilitation Devices under the China Association of Assistive Products, and the Technical Committee of Rehabilitation Engineering under the Shanghai Society of Biomedical Engineering. Prof. Yu is also one of the main founders of the Coalition of Rehabilitation Engineering and Assistive Technology, Asia (CREATe Asia). He received the National Baosteel Excellent Teacher Award, won the honorary title of the Most Beautiful Rehabilitation Sci-Tech Worker, recognized as a Shanghai Model Worker, and was awarded the Shanghai Model Worker Innovation Studio, etc.

Academic Positions: President-elect of Coalition of Rehabilitation Engineering and Assistive Technology of Asia (CREATe Asia), president of Shanghai Rehabilitation Device Association, chairman of Committee of Rehabilitation Engineering and Industry Development under Chinese Association of Rehabilitation Medicine, president of Rehabilitation Robot Alliance, chairman of Committee of Rehabilitation Devices under China Association of Assistive Products. He is the member of the expert committee for the National Key Research and Development Program of China, also the chair of expert committee for over ten research projects of National Key Research and Development Program of China. He served as the general chair of the 1st to the 7th Shanghai Rehabilitation Engineering Forum, general chair of the 1st to the 4th China Rehabilitation Robot Conference, general chair of the 12th and the 17th i-CREATe, and general chair of the 1st World Rehabilitation Robot Conference(WRRC).

**Her Royal Highness
Princess Maha Chakri Sirindhorn**
Kingdom of Thailand

Ms. Haidi Zhang
President of Rehabilitation International
Former President of China Disabled Persons' Federation

Prof. Yudong Gu
Academician of the Chinese
Academy of Engineering

Prof. Kerong Dai
Academician of the Chinese
Academy of Engineering

Prof. Junhao Chu
Academician of the Chinese
Academy of Sciences

Prof. Erdan Dong
President of University of Health
and Rehabilitation

Sciences Academician of the Chinese
Academy of Engineering

Prof. Songlin Zhuang
Academician of the Chinese
Academy of Engineering

Prof. Jianwei Zhang
Foreign Academician of the Chinese
Academy of Engineering

Prof. Lidian Chen
President of Chinese Association of
Rehabilitation Medicine

Prof. Lingyu Wang
Communist Party Secretary of University
of Shanghai for Science and Technology

Prof. Mingqiang Peng
Communist Party Secretary and
ExecutiveDeputy President of Chinese
Association of Rehabilitation Medicine

Prof. Xinyuan Zhu
President of University of Shanghai
for Science and Technology

Prof. Guoen Fang
Formal President of Chinese Association of
Rehabilitation Medicine, Chair of the Expert
Committee of Chinese Associationof
Rehabilitation Medicine

Prof. Zhong Zhang
Vice President of University of Shanghai
for Science and Technology

Prof. Gerard E. Francisco
President of International Society
of Physical and Rehabilitation Medicine

Prof. Heping Yan
President of the China Association
of Assistive Products, China

Prof. Luc De Witte
President of Global Alliance of Assistive
Technology Organizations

Prof. Yuejin Cao
Vice Executive Director and Secretary-General
of China Association of Rehabilitation
of Disabled Persons

Mr. Yujun Zhu
Deputy Director General of Department
of Social Affairs Ministry of Civil Affairs, PRC

Prof. Yi Peng
Secretary-General of Chinese Society
of Biomedical Engineering，CSBME

Mr. Songquan Du
Chairman of Shanghai
Disabled Persons' Federation

Mr. Deming Kong
Director of China Assistive Devices and
Technology Center for Persons with Disabilities

Mr. Min Shen
Deputy Director of Shanghai Civil
Affairs Bureau

Mr. Yuanchang Zheng
Communist Party Secretary of National
Research Center for Rehabilitation
Technical Aids

Mr. Yinliang Zhang
Vice President of China
Disabled Persons' Federation

Mr. Zhou Haiying
Mayor of Yangpu District, Shanghai

Sunil Agrawal

Sunil Agrawal received a Ph.D. degree in Mechanical Engineering from Stanford University in 1990. He is currently a Professor and Director of Robotics and Rehabilitation (ROAR) Laboratory at Columbia University, located both in engineering and medical campuses of the university. Dr. Agrawal has published more than 500 journal and conference papers, 18 U.S. patents, and 3 books. He is a Fellow of the ASME and AIMBE. His honors include a NSF Presidential Faculty Fellowship from the White House in 1994, a Bessel Prize from Germany in 2003, and a Humboldt US Senior Scientist Award in 2007. He is a recipient of 2016 Machine Design Award from ASME for "seminal contributions to design of robotic exoskeletons for gait training of stroke patients" and 2016 Mechanisms and Robotics Award from the ASME for "cumulative contributions and being an international leading figure in mechanical design and robotics". He is a 2023 recipient of A. S. Paintal Chair of Indian National Science Academy. He was a Plenary Speaker at the 2024 IEEE Internal Conference in Robotics and Automation in Yokohama (Japan). He has successfully directed 35 PhD student theses and has received Best Paper awards in ASME and IEEE sponsored robotics conferences. He is the founding Editor-in-Chief of the journal "Wearable Technologies" published by Cambridge University Press. He organized the IEEE BioRob 2020 conference in New York City and served as its conference chair.

Wei Tech Ang

Professor ANG WEI TECH obtained his master's degree in Mechanical and Aerospace Engineering from Nanyang Technological University (NTU) in Singapore, and his Ph.D. in Medical Robotics from Carnegie Mellon University in the United States. Currently, he is a tenured professor at NTU and has previously served as the Associate Dean of the School of Mechanical and Aerospace Engineering at NTU. He is also the founding director of the Rehabilitation Research Institute of Singapore (RRIS).
Professor Ang's research focuses on medical, rehabilitation and assistive robots. He has led 33 related research projects with a total funding exceeding 50 million SGD (approximately 270 million RMB). He has obtained 40 patents and published 212 papers. His handheld surgical robot startup company won the first prize at the 10th China Shenzhen Innovation and Entrepreneurship Competition and the third prize at the 2022 Jinji Lake Innovation and Entrepreneurship Competition.

Shao ping Bai

Dr. Shaoping Bai is a full professor at Department of Materials and Production, Aalborg University (AAU), Denmark. His research interests include wearable sensors, medical and assistive robots, and exoskeletons. Dr. Bai leads several national and international research projects in exoskeletons, including EU AXO-SUIT and IFD Grand Solutions project EXO-AIDER, and Danish Independent Research Council project VIEXO, among others. He is a recipient of IEEE CIS-RAM 2017 Best Paper Award, IFToMM MEDER 2018 Best Application Paper Award and WearRAcon2018 Grand Prize of Innovation Challenges. Dr. Bai is associate editor of ASME J. of Mechanisms and Robotics, IEEE Robotics and Automation Letters, and Robotica. He is the founder of BioX ApS, an AAU spin-off on wearable technologies. He is an elected member of IFToMM Executive Council and serves as a deputy chair of IFToMM Denmark.

Yulong Bai

Yulong Bai is a Chief Physician, Professor, and Doctoral Supervisor and serves as the Director of the Department of Rehabilitation Medicine at Huashan Hospital, Fudan University. He has long engaged in basic and clinical research on the rehabilitation of neurological diseases. He holds the position of Vice Chairman of the Neurorehabilitation Professional Committee of the Chinese Association of Rehabilitation Medicine, Vice Chairman of the Cerebrovascular Diseases Interventional Therapy and Rehabilitation Professional Committee, Vice Chairman of the Stroke Rehabilitation Branch of the Chinese Stroke Association, Vice Chairman of the Rehabilitation Medicine Branch of the CDGM, and Chairman of the Rehabilitation Equipment Transformation Working Committee of the Chinese Medicine Education Association. Additionally, he is a member of the Expert Committee for the Million Disability Reduction Project of the National Health Commission of the People's Republic of China, a member of the National Health Science Popularization Expert Database, and the director of the National Key Clinical Specialty (Phase II) in Rehabilitation Medicine. He has led four projects supported by the National Natural Science Foundation of China, one National Key Special Project, and over ten provincial and municipal scientific research projects. As the first and corresponding author, he has published over 170 papers, including over 30 SCI papers. He has also served as the chief translator and associate editor of more than 20 monographs related to rehabilitation medicine. He has won multiple awards, including the second prize in the Ministry of Education's Science and Technology Award.

Massimo Bergamasco

MASSIMO BERGAMASCO is Full Professor of Theory of Mechanisms and Machines at the Scuola Superiore Sant'Anna, Pisa, Italy. From 2021 to 2024 he acted as the Director of the Institute of Mechanical Intelligence of the Scuola. In 1991 he founded the Perceptual Robotics Laboratory and, from 2016 to 2019, he acted as the Director of the Institute of Communication, Information and Perception Technologies of the Scuola. From 2018 to 2022 he has been appointed as President of the Artes 4.0 Competence Center coordinated by the Scuola Superiore Sant'Anna.

His research activity deals with the study and development of haptic interfaces and wearable robots for telepresence and for the control of the interaction between humans and Virtual Environments. His present research is focused on general aspects of perception and cognitive processes in the field of embodiment and social perception. Recently, in the framework of the new research area "Natural and Mechanical Minds", he started a line of research for the development of intelligent virtual humans in Virtual Environments.

Xia Bi

A medical PhD, chief physician, and master's research supervisor, currently serves as the director of the Rehabilitation Medicine Department at Zhoupu Hospital in Pudong New Area, Shanghai, and the vice president of Rehabilitation College of Shanghai Health Medical College. Engaged in clinical, teaching, and scientific research in rehabilitation medicine for 25 years. She have published over 40 papers in core journals of rehabilitation medicine and SCI, led more than 20 scientific research projects, and won more than 10 honors such as the Talent Discipline Award, the Third Prize of Military Science and Technology Progress Award, and the Third Prize of Military Medical Achievements. She have also obtained 3 patents and 13 academic positions, including the Executive Director of the Shanghai Rehabilitation Medicine Association. Professional expertise: clinical diagnosis, treatment, and research on stroke rehabilitation, chronic lower back pain rehabilitation, and perioperative rehabilitation in orthopedics.

Etienne Burdet

Dr. Etienne Burdet is Professor and Chair of Human Robotics at the Imperial College of Science, Technology and Medicine in UK. He is also a visiting Professor at University College London. He holds an MSc in Mathematics (1990), an MSc in Physics (1991), and a PhD in Robotics (1996), all from ETH-Zurich. He was a postdoctoral fellow with TE Milner from McGill University, Canada, JE Colgate from Northwestern University, USA and Mitsuo Kawato of ATR in Japan. Professor Burdet's group uses an integrative approach of neuroscience and robotics to: i) investigate human sensorimotor control, and ii) design efficient interfaces for daily living technology and neurorehabilitation, which are tested in human experiments and commercialised.

Wujing Cao

Wujing Cao is an Associate Professor at the Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences (CAS), and a Master's thesis supervisor at the University of Chinese Academy of Sciences. He is also a young talent supported by the China Association for Science and Technology (recommended by the Chinese Society of Rehabilitation Medicine). His main research focuses on lower limb exoskeletons and intelligent prosthetics. He has led or participated in 10 approved national, provincial, and municipal scientific research projects. As the first author or corresponding author, he has published 20 SCI-indexed journal articles, including 2 ESI Highly Cited Papers. He has been granted 25 patents, and he was ranked first in receiving the Second Prize of the Science and Technology Award from the Chinese Society of Rehabilitation Medicine, as well as the Chapecoense Outstanding Young Scholar Award. He has also contributed to winning the First Prize for Technological Invention in Guangdong Province, the First Prize for Technological Invention in Shenzhen City, and the Second Prize for Scientific and Technological Progress in Chongqing Municipality. Currently, he serves as a Standing Committee Member and Secretary-General of the Youth Working Committee of the Chinese Society of Rehabilitation Medicine, a youth editorial board member of the "Robot" magazine, and a special issue editor for three SCI-indexed journals.

Vincenzo Parenti Castelli

Born (1949). Laurea degree (1973) in Mechanical Engineering cum laude at the University of Bologna, and licence for engineering profession. Married with Anna Maria Berti (1982). Full professor of Mechanics of Machines (MM) (1989). Professor Emeritus of Bologna University (2022).

He thought courses and advised many Master Theses and more than 20 PhD Italian and foreign students in the field of MM and Biomechanics. He covered many academic positions, among which Deputy Head of the Mechanical Engineering Department (2000-2006).He authored and co-authored more than 400 scientific publications in the field of gas porous journal bearings, methods of machine design, fault diagnosis and monitoring of gears, automated systems for milking machines, methods for the kinematic and dynamic analysis of open and closed kinematic chains and robot manipulators, biomechanics. Inventor of five patents on parallel mechanisms, articular prostheses, and laparoscopic surgical tools. Invited lecturer at several foreign Institutions.

Visiting professor at many foreign universities, among which (University of Illinois at Chicago (1982-1990), University of Florida (1990), Tongji University (Shanghai) (2010-2018), University of Shanghai for Science and Technology (Shanghai) (2024). Principal investigator of many funded projects by National and International Institutions.

He received research Awards, among which Knights of Work (1975), Fulbright (1982), CNR (1983), D'AURIA Prize 2009 for the best rehabilitation robotic device (human upper arm prosthesis), IFToMM Dedicated Service Award (2018), Guest of Honor in Rennes City Hall (2018). 2022 DED ASME Mechanisms and Robotics Award, Best paper awards at IFToMM 2007 World International Congress, and Best Application paper award at IFIT 2020.

Chair and Co-Chair of national and international conference Proceedings. Editor-in-Chief of the Intl Journal Meccanica, Springer (2004-2012). Associate editor of International Journals, among which Meccanica, MMT (Mechanism and Machine Theory), ASME JMR (Journal of Mechanisms and Robotics). Member of the Honorary Advisory Board of MMT. Chair and member of IFToMM Permanent Commissions (Publications, Biomechanics, Robotics and Mechatronics, Computational Kinematics).

Member of scientific Societies such as Lombardo Institute-Academy of Sciences and Literature, Associate Member of the Jozef Stefan Institute of Ljubljana, Member of the Academy of Sciences of Bologna, Member of the Scientific Committee of the Bologna College of China, Member of the European Academy of Sciences (EUAS). Since 2010 Representative of CISM (International Centre for Mechanical Sciences) in IFToMM.

Chairman of scientific sessions at International Conferences. Reviewer for national and international journals. Member of Scientific and Organizing Committees of International Conferences.

Liguo Chang

Deputy Secretary and Hospital Director of The Third People Hospital in Liaocheng. Chief Physician of Neurology and Professor.Currently a standing committee member of the Stroke Prevention and Early Warning Group of the Chronic Disease Prevention and Control Branch of the Chinese Medical Association.

Committee member of the Stroke and Dizziness Subcommittee of the Chinese Stroke Association.

Committee member of the Neurocritical Care Committee of the Chinese Stroke Association, member of the Shandong Stroke Association.Executive committee member of the Cerebrovascular Disease Physicians Branch of the Shandong Medical Association.

Committee member of the Disease and Health Management Professional Committee of the Shandong Hospital Association.Vice Chair of the Cerebrovascular Disease Professional Committee of the Shandong Geriatrics Association.-Committee member of the Neurology Professional Committee of the Shandong Medical Association.Committee member of the Neurology Professional Committee of the Shandong Association of Traditional Chinese and Western Medicine.

Chair of the Cerebrovascular Disease Committee of the Liaocheng Medical Association.Director of the Neurology Quality Control Center of Liaocheng, Deputy Chair of the Neuroscience Committee of the Liaocheng Medical Association, and Chief Health Management Expert of Liaocheng.Research Areas: Cerebrovascular diseases, speech and swallowing disorders, limb function rehabilitation, complex neurological disorders.

Main academic achievements:

1.Research papers: Engaged in clinical research in neurology for more than 30 years. He specializes in the diagnosis and treatment of cerebrovascular disease, headache, vertigo, epilepsy, speech and swallowing disorders, limb function rehabilitation, and difficult neurological diseases. He has participated in the large-scale clinical research on Magnesium agent for cerebral infarction organized by the University of Glasgow, UK. Has published more than 30 papers in Chinese series and national core journals, authored 10 books, and co-authored 2 additional books.

2.Honors and awards: He has completed over 20 scientific researches above the municipal level or higher, including 5 first-class awards, 2 second-class awards and more than 10 third-class awards, and has been received the "Fumin Xinglu" Labour Medal of Shandong Province, Liaocheng City "Youth Science and Technology Award", "Top Talent of Professional Technology", "Pioneer of Industry Style Construction of the Health System", "Top Ten Doctors", "Outstanding Young and Middle-aged Doctor" and other honors.

3.Patent application: The scientific research papers won three national patents, more than ten provincial and municipal level.

Chen Chen

Chen's research mainly focuses on neural interaction technology and bio-electro-mechanical robotics. The current neural control interfaces can only achieve discrete action pattern recognition and require large sample-size training. He proposed a non-invasive reverse decoding method for motor unit action potential train, constructed a new generation neural control model with 'near-zero training,' and completed multi-DoF prosthesis control experiments. This work promotes the development of neural interface technology from pattern matching to neural information decoding. Chen obtained his bachelor's degree from Xiamen University in 2015 and his Ph.D. from Shanghai Jiao Tong University in 2021. He was selected for the National Postdoctoral Innovation Talent Support Program and the Shanghai 'Super Postdoctoral Program. He has presided over projects such as the National Natural Science Foundation Youth Fund and postdoctoral general projects. In the past five years, he has published more than 20 papers in academic journals and international conferences, such as IEEE Transactions on Biomedical Engineering and the Journal of Neural Engineering.

Guimin Chen

Guimin Chen is a Full Professor of Xi'an Jiaotong University. He had been working as a visiting professor at Compliant Mechanism Research Lab of Brigham Young University. His major research interests include compliant mechanisms and their applications in robotics. He was the recipient of 2018 ASME Compliant Mechanisms Award. He serves as an Associate Editor of ASME Letters in Translational Robotics, and served as an Associate Editor of IEEE Transactions on Automation Science and Engineering and ASME Journal of Mechanisms and Robotics. He is also a Fellow of ASME.

Diansheng Chen

Having received his PhD degree in Mechanical Engineering and Automation from Jilin University in 2003, he also obtained "excellent post-doctorate" title from Beihang University. He is a full professor in mechanical engineering and automation department, an advisor of PhD students, senior member of Chinese Mechanical Engineering Society, member of IEEE.

Professor Chen's primary research interests are fields of service robotics, bio-robotics, and intelligent mechatronics control technology. He has undertaken 5 projects on National Natural Science Foundation of China, hosted 10 projects on National High Technology Research and Development Programs(863 plan), National Key Scientific and Technological Projects, and provincial research projects. He currently hosts a key 863 plan on service robotics. About the honors, he has gained two first prizes, two second prizes, and two third prizes of ministerial-level scientific and technological progresses, ten patents, 2 software copyrights registers, and published 2 monographs on teaching, and over 120 articles in core journals and important international conferences, 100 of which are included by EI or SCI.

Jian'er Chen

Professor Chen Jian'er, doctoral supervisor (Sino foreign joint training), honorary chairman of the Rehabilitation Medicine Education Professional Committee of the Chinese Rehabilitation Medicine Association, chairman of the Expert Committee, member of the Expert Advisory Committee of the National Health Education Guidance Committee, and director of the Construction and Evaluation Committee of the "Thirteenth Five Year Plan" Rehabilitation Treatment Technology major Planning Textbook of the National Health Commission; President of Zhejiang Disabled Persons' Rehabilitation Association and Chairman of the Neurorehabilitation and Intelligent Rehabilitation Professional Committee; Vice Director of the Academic Committee of Zhejiang Province Traditional Chinese Medicine Rehabilitation Intelligent Technology and Equipment Engineering Research Center, Distinguished Expert of Affiliated Rehabilitation Hospital of Zhejiang Chinese Medical University /Zhejiang Rehabilitation Medical Center, Honorary Director of the Academic Committee, and Honorary Director of the Rehabilitation Medicine Research Institute.

Research direction: Fundamentals and clinical applications of neural rehabilitation, neural regulation and intelligent rehabilitation.

Lingling Chen

Lingling Chen is a professor and doctoral tutor at School of Artificial Intelligence, Hebei University of Technology, Yuanguang scholar of Hebei University of Technology, Deputy Director of the Engineering Research Center of the Ministry of Education for Intelligent Rehabilitation Equipment and Detection Technologies, Visiting Scholar in the University of Maryland School of Medicine. She received the Ph.D. degrees in January 2010 from Hebei University of Technology. Her current research interests include robot for the disabled and the elderly, intelligent rehabilitation aids and human-computer interaction. She has presided over 8 national and provincial projects, such as the National Key Research and Development Program of China and the National Natural Science Foundation of China. She has published more than 40 papers, obtained more than 20 patents, and won two provincial and ministerial-level science and technology awards.

Nan Chen

PhD. Doctoral supervisor, Senior Technologist. Secretary of the Party Branch, Department of Rehabilitation, Xinhua Hospital to Shanghai Jiaotong University School of Medicine, Shanghai, China. Member of Chinese Physical Therapy Association Professional Committee and seves as the leader of Pediatric Rehabilitation Committee. Member and secretary of Shanghai Physical Therapy Association Professional Committee. Chaired one surface project of National Natural Science Foundation of China, one youth project, and three bureau-level projects. Published 16 SCI articles and 6 Chinese core journals as first author or corresponding author; co-edited one textbook of Human Health Publishing House.

SHe has been engaged in clinical, teaching and scientific research work of rehabilitation medicine for 20 years, and is good at clinical, teaching and research work of rehabilitation treatment of children and elderly chronic diseases, especially the diagnosis, evaluation and rehabilitation treatment of children's neurological diseases, bone and joint injuries, congenital malformation, children's congenital heart disease, elderly sarcopenia and other diseases; The international advanced rehabilitation diagnosis and treatment technology and the latest rehabilitation treatment guidelines are constantly introduced into the rehabilitation medical work.

Tao Chen

Associate professor, director of the Department of Industrial Design and master's tutor of University of Shanghai for Science and Technology, deputy secretary-general of the Cultural Office Industry Branch of the China Industrial Design Association, member of the Shanghai Creative Design Workers Association, member of the National Standardization Technical Committee, member of the Shanghai Overseas Returned Scholars Association, vice chairman of the Youth Working Committee.

Weidong Chen

Received his B.S. and M.S. degrees in Control Engineering in 1990 and 1993, and Ph.D. degree in Mechatronics in 1996, respectively, all from the Harbin Institute of Technology, Harbin, China. Since 1996, he has been at the Shanghai Jiao Tong University where he is currently a Professor of the Department of Automation, and the Deputy Dean of the Institute of Medical Robotics. He is the founder of the Autonomous Robot Laboratory. From 2013 to 2019, he served as the Chair of the Department of Automation. He was a visiting professor in the Artificial Intelligence Laboratory at the University of Zurich in Switzerland in 2012. He has been a visiting professor in the Brain Science Life Support Research Center at the University of Electro-Communications in Japan since 2016. Dr. Chen obtained the Shanghai Science and Technology Progress Award, the Shanghai Teaching Achievement Award, the Service Robotics Best Paper Award of the IEEE ICRA conference. Dr. Chen's current research interests include perception and control of robotic systems, multi-robot systems and medical robotics.

Shih-Ching Chen

Physician / Professor
Chairman of Taiwan association of rehabilitation medicine
Former dean of medical school of Taipei medical university
Director of Taiwan association of rehabilitation engineering and assistive technology

Wenming Chen

Wenming Chen received the Ph.D. degree in biomedical engineering from the National University of Singapore (NUS), Singapore, in 2011. He finished his Postdoctoral Training with the Biomechanical Engineering Research Group, University of Melbourne, Australia, from 2011 to 2013, where he continued to work as a Research Fellow, from 2013 to 2016. He is currently a Professor with the Academy for Engineering and Technology, Director of the Biomechanics and Rehabilitation Engineering Research Group, Fudan University, Shanghai, China.

His research interests include clinical biomechanics, intelligent orthosis, and prosthesis, with particular emphasis on the foot and ankle complex. He has published over 60 high-impact SCI papers in prestigious journals, such as Journal of Biomechanics, Gait & Posture, Biomedical Signal Processing and Control, and IEEE Transactions on Neural Systems and Rehabilitation Engineering etc. His research was granted over 40 national invention patents. Currently, he holds several prestigious positions, including the Secretary-General of the Biomechanics Committee of the Shanghai Biomedical Engineering Society, a Steering Committee Member of the Biomechanics and Rehabilitation Devices Branch of the Chinese Society for Biomaterials, a Young Committee Member of the Digital Medicine Branch of the Chinese Medical Association, and an Editorial Board Member of SCI journals such as Applied Bionics and Biomechanics.

His academic accomplishments have been recognized internationally, awarded as an "Outstanding Young Scientist" by the Asia-Pacific Biomechanics Society, the Yamaguchi Medal presented by the Japan Society of Mechanical Engineers (JSME), and the Martyn Shorten Award for Innovation from the International Society of Biomechanics (ISB).

Zhuoming Chen

Vice President of Brain Hospital of the First Affiliated Hospital of Jinan University, Director of Rehabilitation Department, chief physician, professor, doctoral supervisor.

Research interests: Specializing in neuropsychological and speech rehabilitation for more than 30 years.

Academic positions: Director of Asia Pacific Society of Speech, Language and Hearing (APSSLH), and the executive chairman of the executive board of the 9th Asia Pacific Conference of Speech, Language and Hearing. leader of the National Speech Linguistics Group of the Chinese Society of Physical Medicine and Rehabilitation, and the deputy chairman of the Speech Therapy Group of the Rehabilitation Therapy Committee of the Chinese Association Rehabilitation Medicine.

Research projects: He has led the National Key Research and Development Projects, 2 National Nature Science Foundation projects, etc., and a total of 16 provincial and ministerial level projects.

Science and Technology Awards: He has won the Science and Technology Award of Guangdong Medical Association once, the second prize of Guangdong Science and Technology Progress Award twice, the second prize and the third prize of Guangzhou Science and Technology Progress Award, the first prize of China Association Rehabilitation Medicine Science and Technology Award, the third prize of China Medical Science and Technology Award, and the third prize of Guangdong Medical Science and Technology Award. As the second author, he won the second prize of Guangdong Science and Technology Progress Award once, and the second prize of Science and Technology Progress Award of Ministry of Education once.

He has published more than 180 academic papers, edited or co-edited 16 books, including Speech Therapy, 3rd Edition, And Language Rehabilitation for Children With Special Needs, Mental And Cognitive Rehabilitation, Speech Therapy, etc.

Hong Cheng

Hong Cheng is a full professor at School of Automation Engineering, University of Electronic Science and Technology of China. He was awarded the "Leading Talent in Science and Technology Innovation of National Ten Thousand Plan" in 2018. He is a Director of Center for Robotics, and Engineering Research Center of Human-Robot Intelligent Technologies and Systems. He is the Associate dean of School of Automation Engineering, and Artificial Intelligence Research Institute. He is a Chairman of Intelligent Rehabilitation Committee of Chinese Rehabilitation Medicine Association, and Ethics Committee of University of Electronic Science and Technology. He has presided/is currently working on more than 10 national projects, including 1 key R&D program project and 6 National Natural Science Foundation projects (1 key project and 3 general projects). The project result "Key technologies and applications of physically tightly coupled human-machine systems" won the Prize of First Class for the Wu Wenjun Science and Technology Award; the project result "Innovation, standardization, and promotion of key technologies for human-machine interaction and autonomous motion of elderly-friendly robots" won the China Federation of Light Industry Science and Technology Progress Award. He has written three textbooks and academic monographs; published more than 200 papers. He was selected into the Elsevier 2005-2015 list of Chinese authors' most downloaded papers in the computer field in the past 10 years. His research has been cited more than 6,000 times according to Google Scholar, with an H-index of 40. Moreover, he has applied for more than 150 national invention patents, of which more than 80 have been authorized.

Kathy Cheng

Dr. Hsin-Yi Kathy Cheng is a professor at the Graduate Institute of Early Intervention, College of Medicine, Chang Gung University, Taiwan. Her research interests include assistive technology R&D, rehabilitation engineering, movement biomechanics, performance evaluation, adapted physical education, motor control, and the use of artificial intelligence in special education. Additionally, she is a physical therapist and an assistive technology professional specializing in the evaluation and adoption of assistive technology in educational settings.

She represents the Taiwan Rehabilitation Engineering and Assistive Technology Society (TREATS) as a board member of the Global Alliance of Assistive Technology Organizations (GAATO). She also serves as a lead therapist for special education and as a review committee member for special education assessment, placement, and assistive device programs. Additionally, she is an executive director of TREATS, a board member of the Taiwan Society of Biomechanics (TSB), and a board member of the Taiwan Society of Movement Science and Technology (TSMST), among other roles.

Long Cheng

Long Cheng received the B.S. (Hons.) degree in control engineering from Nankai University, Tianjin, China, in 2004, and the Ph.D. (Hons.) degree in control theory and control engineering from the Institute of Automation, Chinese Academy of Sciences, Beijing, China, in 2009. He is currently a Full Professor with the Institute of Automation, Chinese Academy of Sciences. He is also an adjunct Professor with University of Chinese Academy of Sciences. He has published over 200 technical papers in peer-refereed journals and prestigious conference proceedings. He was a recipient of the IEEE Transactions on Neural Networks Outstanding Paper Award from IEEE Computational Intelligence Society, the Aharon Katzir Young Investigator Award from International Neural Networks Society and the Young Researcher Award from Asian Pacific Neural Networks Society. He is currently serving the Associate Editor/Editorial Board Member of IEEE/ASME Transactions on Mechatronics, IEEE Transactions on Cybernetics, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Cognitive and Developmental Systems, Science China Information Sciences, Science China Technological Sciences, and Acta Automatica Sinica. Dr. Cheng is a Fellow of the IEEE/IET.

Xiankai Cheng

Associate Researcher of Suzhou Institute of Biomedical Engineering and Technology (SIBET), Specially Appointed Key Position at the Chinese Academy of Sciences, Senior Member of the China Computer Federation (CCF), Member of the CCF Virtual Reality and Visualization Technology Professional Committee, and Member of Brain-Computer Interface and Rehabilitation Professional Committee of the Chinese Association of Rehabilitation Medicine. He has long been engaged in virtual reality technology and system development, focusing on the rehabilitation and evaluation of cognitive dysfunctions based on virtual reality technology, and human factors engineering psychological intervention technology. He has led or participated in more than 20 national, provincial and enterprise-commissioned projects, published more than 20 papers, applied for more than 30 patents, and developed more than 20 devices. The "Rehabilitation Training System for Cognitive Impairment" and the "Virtual Simulation CAVE System of Five-Plan Projection," which he developed, were selected for "2021 Self-Developed Scientific Instruments of Chinese Academy of Sciences".

Sophie Dewil

Sophie Dewil is a graduate research assistant pursuing a Ph.D. in technology-driven movement (motor) rehabilitation at Stevens Institute of Technology in the Department of Biomedical Engineering (BME). She has previously earned a Bachelor's degree in Cognitive Science and Neuroscience (Vassar College) and a Master's degree in BME (Stevens). Sophie is conducting her doctoral work under the supervision of Dr. Raviraj Nataraj in the Movement Control and Rehabilitation (MOCORE) Laboratory. The lab investigates the optimization of sensory-driven cues delivered through computerized interfaces, such as virtual reality (VR), for motor rehabilitation training. Sophie's dissertation examines multisensory perturbations during training to evoke brain-level responses conducive to better motor learning.

At the MOCORE lab, Sophie has contributed significantly to developing human-machine interfaces with VR and wearable technologies that train improved motor control for those with movement disabilities after neurological traumas. Sophie has presented these works at several conferences, including the Northeast Bioengineering Conference (NEBEC), the American Society of Biomechanics (ASB), Computer-Based Medical Systems (CBMS by IEEE), and the International Conference on Virtual Reality (ICVR by IEEE). Her work has also been published in numerous peer-reviewed conference proceedings and journal publications, including a first-author review article in the Journal of Multimodal User Interfaces. While at Stevens, Sophie has held a position of Health Science Technician at the James J. Peters VA Medical Center supporting clinical trials for smart technologies that recover upper-body function in patients with spinal cord injury (SCI) and traumatic brain injury (TBI).

In addition to her research, Sophie is deeply committed to educational outreach. At the MOCORE Laboratory, Sophie has been the programmatic lead in a VR education initiative for high school students for over two years. The program aims to broaden student awareness about career paths in rehabilitation while developing technical (computer programming) and scientific communication skills. Sophie leads weekly meetings with the high school students to guide them in developing custom applications related to VR rehabilitation. Through other community outreach activities, Sophie leads lab demonstrations to encourage STEM-underrepresented students to explore careers in science and technology. Through her past and ongoing contributions to scientific works, Sophie has demonstrated a deep and unwavering commitment to advancing technology-driven treatments that improve the quality of life for those with neurological impairments. Furthermore, Sophie continues to passionately support the next generation of pre-college students in pursuing careers as rehabilitation scientists and engineers.

Tian Deng

Director and General Manager
10 years of experience in innovative medical device R&D and registration;
Former Regulatory Engineering Manager at InferVision, the first company globally to obtain four-country registration for AI medical products, and the first in China to receive a Class III certification for AI-based lung nodule detection;
Former Clinical Registration Director at Turing Microbiology, an IVD+AI company, and Clinical Registration Director and Government Affairs Lead at Infinite Science, a digital therapy company;
Bachelor's and Master's degrees in Control Science and Engineering from Beihang University.

Wei Ding

Wei Ding, Ph.D., Founder of MOMA Design, Director of the Institute of Art and Design at East China University of Science and Technology, Director of the Future Design Institute of Shanghai Tsinghua International Innovation Center, Chief Curator of the Industry Exhibition at the 2023 World Design Capital Conference, Former Dean of the School of Art, Design and Media at the East China University of Science and Technology, Vice President of the Shanghai Industrial Design Association, Vice Chairman of the Shanghai Creative Workers Association, and Vice President of the Shanghai Young Creative Talent Association, Vice Chairman of Shanghai Creative Workers Association, Vice Chairman of Shanghai Young Creative Talents Association, Executive Committee Member of Shanghai Federation of Industry and Commerce.

He was awarded Forbes China's Top 10 Most Commercially Valuable Intelligent Designers, Shanghai Socialist Constructor with Chinese Characteristics, UNESCO Creative New Talent Award, Red Dot Award, IF Design Award, IDEA, G-MARK, Silver Medal of China Industrial Design Contribution Award, China's Top 10 Industrial Designers, China's Red Star Bonus Prize, and so on.

Ding Wei has rich experience in design practice, founded China's top ten industrial design organizations, led the team to complete more than 2,000 design works, serving Philips, GE, Haier, Midea and many other companies, won more than 360 international awards; has a wealth of academic research results, published the "Evolution of Design", "Design Management", "A New View of Cultural and Creative Design", "Zoomed-in Design" and other books. In recent years, Ding Wei has promoted social design projects such as the Design County Program, Design Innovative City Evaluation Indicator Research, and Township Creative Community, utilizing the power of design to promote regional social innovation in cities, counties and villages.

Xilun Ding

Professor Xilun Ding is the dean of School of Mechanical Engineering and Automation, Beihang University. He received the National Science Fund for Distinguished Young Scholars from NSFC in 2011，and became a Chair Professor of the Cheung Kong Scholars Program of the Ministry of Education of the People's Republic of China in 2014. He has been the PI of the National Science Fund for Creative Research Groups of NSFC since 2021.

In the field of robotics mechanics and bionic robotics research, he has achieved outstanding results, publishing more than 300 academic papers in authoritative international journals such as Nature Astronomy, Science Robotics, ASME/IEEE Transactions, and important international conferences. He has authored 4 academic monographs and co-authored 2 Chinese and 2 English monographs respectively. He has been granted more than 120 invention patents, of which more than 30 have been successfully applied to several national major projects. His achievements have won the Second Prize of the National Technology Invention Award (2018, ranked first) and several other ministry-level scientific and technological awards.

He serves as a committee member of the Robotics and Mechatronics Technology Committee of the International Federation for the Promotion of Mechanism and Machine Science (IFTOMM), vice chairman of the Service Robot Professional Committee of the China Productivity Promotion Center Association and the Artificial Intelligence and Robotics Education Professional Committee of the Chinese Association of Automation. He is also an associate editor of the international journals Robotica and ASME Open Journal of Engineering, and a member of the editorial board of Chinese Journal of Aeronautics and Chinese Journal of Mechanical Engineering. He has previously served as Associate Editor of Journal of Mechanisms and Robotics-Transactions of the ASME (2013-2019) and as chairman, organizing committee chair, or session chair of several international conferences in the field, including those organized by ASME, IEEE, and IFTOMM.

Liquan Dong

Professor, Deputy Director of China Assistive Devices and Technology Center for Persons with Disabilities, assistive technology expert of World Health Organization (WHO), Deputy Chairman of the Professional Committee of Biomedical Engineering and Technology Transformation Promotion of Chinese Rehabilitation Medical Association, Deputy Chairman of the Rehabilitation Engineering Branch of Chinese Society of Biomedical Engineering, and Chairman of the Rehabilitation Engineering and Assistive Technology Professional Committee of China Rehabilitation Association for Disabled Persons; He has been engaged in the research of China's assistive technology system for a long time, promoted the establishment of a new national occupation "rehabilitation assistive technology consultant", and promoted the support system and specialized construction of assistive devices. Presided over the national key research and development plan "Active Health and aging technology Response" in 2018, the key special project "Study and Pilots of Assistive Products' Assessment and Fitting System for Persons with Disabilities and Elderly People with Entire or Partial Physical Functions Decline", participated in the eleventh Five-Year and Twelfth Five-Year national science and technology support projects, national, provincial and ministerial level and bureau level scientific research projects; Actively promote the development of assistive technologies globally. In 2018, as China's representative, participated in the World Health Assembly, discussed and voted on the resolution "Improving Access to Assistive Technologies", and co-hosted a side meeting on assistive technologies. Responsible for RATA China project application and implementation; Participate in APL work; Promote participation in the Global Assistive Technology Partnership.

Mingjie Dong

Mr. Mingjie Dong is an associate professor and doctoral supervisor of Beijing University of Technology, Beijing, China. He is an IEEE Senior Member, Member of CAAI, CAA and CSBME. His researches include rehabilitation robots and external fixators, spinal deformity correction and evaluation, etc. He is the PI of many projects, such as the National Natural Science Foundation of China, Beijing Municipal Natural Science Foundation, the sub-project of the National Key R&D Program, etc. He has published more than 70 papers in academic journals and conferences such as TMECH, TIE, MMT, TCDS, TNSRE, etc., with Google Scholar Citations more than 890, h-index 19. He has won the JMST Best Paper Award 2021 and ICCSIP 2022 Best Conference Paper Award.

Qing Du

Qing Du, Chief Physician, Medical Doctoral Supervisor, Director of Rehabilitation Medicine Department at Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, and Vice Dean of Yuanshen Rehabilitation Research Institute at Shanghai Jiao Tong University School of Medicine, Chief Scientist of the National Key Research and Development Program. Chairman of the Science Popularization Working Committee of the Chinese Rehabilitation Medicine Association, President-Elect of the Children's Rehabilitation Professional Committee of the Chinese Rehabilitation Medicine Association, Standing Committee Member of the Health Lifestyle and Community Health Special Committee of the Chinese Preventive Medicine Association, and President-Elect of the Physical Medicine and Rehabilitation Specialty Branch of the Shanghai Medical Association.

Zulin Dou

Second level professor/first level chief physician; The leader of the Rehabilitation Department of Third Affiliated Hospital, Sun Yat-sen University. Specializing in the assessment and treatment of swallowing, motor, and cognitive disorders such as stroke, traumatic brain injury, and senile dementia. He has innovatively pioneered a series of advanced technologies for the assessment and treatment of swallowing disorders, such as the management of airways tube that cannot be removed for a long time after tracheotomy due to various diseases, and the installation and use of Passy Muir speeching valves; Muscle spasms such as limb spasms, facial spasms, and spasmodic torticollis should be treated with precise targeted injection of botulinum toxin guided by ultrasound and electromyography. As the chief expert in the field of swallowing disorders in China, he has visited the United States, Japan and other countries, as well as Hong Kong, Taiwan, China and other places in China for exchange and study, and has enjoyed a high reputation internationally. Current Vice President of the Asian Swallowing Disorders Association; Vice President of the Chinese Rehabilitation Medicine Association; President of Guangdong Rehabilitation Medicine Association; Honorary Chairman of the Swallowing Disorders Professional Committee of the Chinese Rehabilitation Medicine Association; Deputy Chief Editor of the Chinese Journal of Physical Medicine and Rehabilitation.

Yanchen Du

Ph.D., professor, doctoral supervisor, one of the academic leaders of the "Rehabilitation Engineering" key innovation team at Shanghai High level University, and a senior visiting scholar at the University of New South Wales in Australia. I have been engaged in research and teaching related to rehabilitation engineering for 18 years, and have a solid theoretical foundation and teaching research and development experience in the fields of rehabilitation engineering and rehabilitation robots. Engaged in long-term research in the field of intelligent rehabilitation engineering, including wearable exoskeleton rehabilitation robots, prosthetic intelligent knee joints, intelligent nursing beds, and vibration rehabilitation equipment. As the project leader, I have led the completion of 2 National Natural Science Foundation projects and 1 National Key Research and Development Program project. As a key technical backbone, participated in 3 National Natural Science Foundation projects, 1 National Key R&D Program, and multiple Shanghai Science and Technology Support Projects, published over 60 academic papers, and obtained 20 authorized patents.

Yubo Fan

Professor Yubo Fan is Dean of School of Biological Science and Medical Engineering, Dean of School of Engineering Medicine, Director of the Medical Engineering Cross Innovation Research Institute, Beihang University. He is Director of Beijing Advanced Innovation Centre for Biomedical Engineering, and Director of Key Laboratory for Biomechanics and Mechanobiology of Ministry of Education of Beihang University. He is the Fellow of AIMBE, IAMBE, IUPESM, and FBSE. He's the past president of Chinese Biomedical Engineering Society, the past council member of World Council of Biomechanics. Prof. Fan specializes in Biomechanics, Mechanobiology, Biomaterials and Rehabilitation Engineering. He has more than 400 peer reviewed journal papers published on international academic journals.

Xiaodong Feng

Professor Xiaodong Feng, Chief Physician, doctoral supervisor, postdoctoral supervisor.

Dean of Henan Provincial Hospital of Traditional Chinese Medicine (the Second Affiliated Hospital of Henan University of Traditional Chinese Medicine).

Dean of Rehabilitation College of Henan University of Traditional Chinese Medicine.

Director of National Regional Center for Traditional Chinese Medicine (rehabilitation) Diagnosis and Treatment.

Academic/Disciplinary Leader of National Key Clinical Speciality, Key disciplines/ Key specialty/ Advantageous Speciality of State Administration of Traditional Chinese Medicine (SACM)

Director of Rehabilitation Centre for Traditional Chinese Medicine of SACM

State Council allowance expert, Zhongyuan famous doctor, Henan High-level Talents, Leading Talents of Chinese Medicine in Henan Province.

Member of the Teaching Steering Committee for Medical Technology, Ministry of Education

Director, Rehabilitation Branch, Chinese Society of Traditional Chinese Medicine (CSTCM)

President of Henan Province Rehabilitation Medicine Association

He has been engaged in the research of Chinese medicine rehabilitation of common functional disorders for 32 years. He has presided over 36 projects at all levels, including 4 national projects, won 7 scientific and technological achievement awards at provincial and ministerial levels, published more than 150 domestic and international core papers as the corresponding author/first author, and has been authorised with 38 patents, among which he has achieved the transformation of 4 patents.

Valentina Fiordelmondo

Ms. Valentina Fiodelmondo is part of the staff of the Innovation Projects Sector of AIAS Bologna onlus and part of the WeCareMore Centre team. She has a degree in Economics (2008) and a master's degree in Social Policy and Sustainable Territorial Development (2011). Since over 10 years supports the coordination, the implementation of research activities and the financial reporting of European and national projects, mainly in the areas of Health&-Care, Digital Inclusion, Inclusive Education and Housing. She is responsible for gender issues and coordinates the Multiple Discrimination Helpdesk for AIAS Bologna.

Gerard E. Francisco, M.D.

President, International Society of Physical and Rehabilitation Medicine;The Wulfe Family Chair in Physical Medicine and Rehabilitation, Department of Physical Medicine and Rehabilitation, University of Texas.Health Science Center at Houston McGovern Medical School ; Chairman, Department of Physical Medicine and Rehabilitation, University of . Texas Health Science Center at Houston McGovern Medical School;Full Professor (with tenure), Department of Physical Medicine and Rehabilitation, University of Texas Health Science Center at Houston McGovern Medical School.Adjunct Professor Department of Physical Medicine and Rehabilitation Baylor College of Medicine, Houston

Kenneth N. K. Fong

Professor and Associate Head (Research, Innovation, and Knowledge Transfer), Department of Rehabilitation Sciences, and Director of the Research Centre for Assistive Technology at PolyU. His background training is in occupational therapy. He is also the management committee member of the Research Institute in AIoT, chairman of University Ethics Committee, and elected member of Senate, PolyU. He had been programme leaders of the BSc(Hons)OT, MOT, and MOT(China) programmes. He is now the Editor-in-Chief of Hong Kong Journal of Occupational Therapy (HKJOT), and honorary advisors of several NGOs and supporting organizations for people with chronic diseases and disabilities in Hong Kong. He is member of the Supplementary Medical Professions Council, Hong Kong SAR, member of the Occupational Therapists Board, Hong Kong SAR, and chairman of the Education Committee and Examination Committee of the Occupational Therapists Board.

He received the Department Outstanding Teaching Award in 2011, the Department Outstanding Team Teaching Award in 2018, and the Faculty Team Teaching Award of the Faculty of Health and Social Sciences in 2010 and 2019 respectively. He has completed supervision for 6 PhD students before; currently, he is supervising 3 PhD students and 5 DHSc students, and co-supervising 7 PhD students at present. His undergraduate and postgraduate students have received numerous awards in the design of assistive technology products in both local and international events including the Global Students Innovation Challenge, i-CREATe, in Asia.

Chenglong Fu

Prof. Chenglong Fu is currently the Director of the Department of Mechanical and Energy Engineering of Southern University of Science and Technology (SUSTech), the Director of Shenzhen Key Laboratory of Biomimetic Robots and Intelligent Systems, the director of Guangdong Key Laboratory of Human Augmentation and Rehabilitation Robots, and the leader of the Joint Fund Innovation Team of the Ministry of Education.

His research interests include dynamic walking, biped and humanoid robots, powered prosthesis, exoskeletons and SuperLimbs. He is the principal investigator of more than 30 research projects. He has published more than 160 papers and holds more than 30 granted patents. He obtained 2022 First Prize of Shenzhen Science and Technology Progress Award, and 2023 First Prize of Science and Technology Progress Award of Chinese Association of Automation.

He is an Associate Editor of Robotica and IEEE Transactions on Automation Science and Engineering.

Feng Gao

Feng Gao is a Chair Professor at the Shanghai Jiao Tong University. He earned his Ph.D. in mechanical engineering at Beijing University of Aeronautics and Astronautics in 1991, and his Master in Mechanical Engineering at Northeast Heavy Machinery Institute in 1982. From 1995 to 1997, he was a postdoctoral research associate in the School of Engineering Science at Simon Fraser University.

He has been serving as the Associate Editors of Mechanism and Machine Theory since 2008 and the ASME Journal of Mechanical Design since 2012, and the General Member of the ASME Mechanisms and Robotics Committee since 2012.

He won the 2013 China National Natural Science Award. And he won the ASME Leonardo Da Vinci Award for his invention of parallel manipulators in USA in 2014.

Yue Gao

Yue Gao, an associate professor and doctoral advisor at the School of Electronic Information and Electrical Engineering, AI Institute, Shanghai Jiao Tong University.

She obtained her Bachelor of Science in Computer Science from the University of Wisconsin-Madison in 2008, she received Master of Science in Computer Science from Cornell University in 2012 and Ph.D.in Computer Science from Cornell University in 2016.

Her research focuses on the control and planning for legged robots. Over the past five years, she has published more than 40 papers in SCI/EI journals, served as Principal Investigator for projects from National Natural Science Foundation and National Key Research and Development Program in China.

Currently, she serves as an Associate Editor for Robotica journal. She has received awards as the Outstanding AI Leader at the World Artificial Intelligence Conference and the first prize in the National University Teaching Innovation Competition.

Yanjuan Geng

Associate researcher and doctoral supervisor at the Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences; visiting scholar at the Chinese University of Hong Kong; high-level professional talents in Shenzhen and leading talents in Nanshan District; youth committee member of the Chinese Society of Biomedical Engineering, member of the Chinese Artificial Intelligence Society, and IEEE Member. Her main research directions are voluntary movement intention decoding, sensory feedback and sensory enhancement, hand function rehabilitation technology and neurological rehabilitation mechanism. She is the principal investigator of general projects supported by National Natural Science Foundation of China, Guangdong Natural Science Foundation, Shenzhen Basic Research General and Key Projects, etc., and the core member of 973 project, 863 project, and key R&D projects supported by the Ministry of Science and Technology of the PRC, projects supported by the National Natural Science Foundation of China, and Guangdong Province key R&D projects. She has published more than 60 academic papers, participated in the writing of 2 monographs, and has authorized more than 10 patents. She won the 9th "Wu Wenjun Artificial Intelligence Technology Invention Third Prize" in 2019. She served as a reviewer for several academic journals, including the Journal of Neural Engineering , IEEE Transactions on Neural System and Rehabilitation Engineering、 IEEE Transactions on Biomedical Engineering, etc. She also served as the section chairman of the international academic conferences, such as IEEE RCAR and IEEE EMBC, and gave invited presentations.

Michael Goldfarb

Dr. Michael Goldfarb is a Professor in the departments of Mechanical Engineering, Electrical Engineering, and Physical Medicine and Rehabilitation at Vanderbilt University. Dr. Goldfarb has authored over 250 publications and been awarded over 40 US patents on topics related to wearable robotics, and was recognized in 2021 by Stanford University as among the Top 2% of most cited scientists. Among his papers are ones awarded best-paper awards in 1997, 1998, 2003, 2007, 2009, 2013, 2020, and 2022 and others that were finalists for best paper awards in 2015, 2017, and 2020. Research interests includes the development of robotic limbs for upper and lower extremity amputees, and the development of exoskeletons for individuals with spinal cord injury and stroke, including the development of a lower limb exoskeleton now sold as the Indego exoskeleton. Dr. Goldfarb was inducted into the US National Academy of Inventors in 2020.

Dongyun Gu

Ph.D. Professor,
Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine.-School of Biomedical Engineering, Shanghai Jiao Tong University, China.Dr. Dongyun Gu is currently Professor in the Department of Orthopaedic Surgery of Shanghai Ninth People's Hospital affiliated to Shanghai Jiao Tong University School of Medicine and has a joint appointment with the School of Biomedical Engineering of Shanghai Jiao Tong University, China. She is the Deputy Director of Engineering Research Center of Digital Medicine of the Ministry of Education, China. Her research interests include gait and movement disorder analysis, neuro-musculoskeletal biomechanics, wearable technologies, machine learning and rehabilitation engineering. Her research group investigates human gait and balance disorder affected by physical disability, neurological disorders, musculoskeletal pathology and age-related diseases, with a goal of developing rehabilitation interventions and improving clinical decision-making. They also focus on the development of wearable technologies for human movement monitoring, fall risk assessment and deep-learning based human pathological gait recognition. Dr. Gu is an Associate Editor of IEEE Transactions on Neural Systems and Rehabilitation Engineering, a core member of the STF (Slips, Trips and Falls) Technical Committee of International Ergonomics Association (IEA), editorial board member of the journal "Gati & Posture", a member of international scientific committee of 3DAHM (3D analysis of human movement) and a Member of Standing Committee of Digital Medicine of Chinese Medical Association.

Shijie Guo

Prof. Shijie Guo received his doctor degree in mechanical engineering from Tokyo Institute of Technology, Japan, in 1992. He is currently a professor at Hebei University of Technology and a part-time professor at Fudan University, China. He is also the director of the Hebei Key Laboratory of Robot Perception and Human-Robot Interaction as well as the Engineering Research Center of the Ministry of Education of China for Intelligent Rehabilitation Equipment and Physiological Information Detection. Additionally, he also serves as the deputy director of the Academic Committee of Hebei University of Technology and editor-in-chief of Journal of Hebei University of Technology. He has long been engaged in the research of key technologies and applications of human-interaction robots, including robotic e-skin, electroactive polymer artificial muscles, nursing-care robots, rehabilitation robots, exoskeleton robots, etc. The intelligent robot skin tactile sensing system developed by his team was selected as the "Innovation China" pioneer technology by China Association for Science and Technology in 2020. The piggyback transfer robot he developed won the Gold Medal at the 8th China Entrepreneurial Design & Innovation Competition of Elderly Welfare Equipment in 2021. In 2022, as the principal investigator, he was awarded the First Prize for Science and Technology Progress in Hebei Province, China.

Guoying Gu

Mr. Guoying Gu is a Professor of School of Mechanical Engineering at Shanghai Jiao Tong University. He was a Humboldt Fellow with University of Oldenburg, Germany. He was a Visiting Scholar at Massachusetts Institute of Technology, National University of Singapore and Concordia University. His research interests include soft robotics, bioinspired and wearable robots, smart materials sensing, actuation and motion control. He is the author or co-author of over 120 publications, which have appeared in Science Robotics, Nature Biomedical Engineering, Nature Reviews Materials, Nature Materials, Nature Communications, Science Advances, IEEE/ASME Trans., Advanced Materials, Soft Robotics, Science China serials etc., as book chapters and in conference proceedings.Dr. Gu received the National Science Fund for Distinguished Young Scholars and the XPLORER PRIZE. Now he serves as Associate Editor of Soft Robotics. He has served as Associate Editor of IEEE Transactions on Robotics and IEEE Robotics and Automation Letters. He has also served for several journals as Editorial Board Member, Topic Editor, or Guest Editor, and several international conferences/symposiums as Chair, Co-Chair, Associate Editor or Program Committee Member.

Shuai Guo

Ph.D., Doctoral Supervisor.
Director of the Robotics Institute at Shanghai University, and Director of the National Engineering Training Center at Shanghai University.
Vice President of the Shanghai Robotics Industry Research Institute.
Visiting scholar at Northwestern University in the United States and Ryerson University in Canada.Vice Chair of the Rehabilitation Equipment Development Promotion Center of the China Medical Education Association.Standing Committee Member of the China Association of Rehabilitation Technology Transformation and Promotion Professional Committee.Member of the China Construction Robotics Professional Committee.Council Member of the China Association of Rehabilitation Technology Transformation and Promotion Alliance.Council Member of Shanghai Robotics Society, member of the Shanghai Electrophysiology Alliance. Research Areas:Primarily engaged in research on medical robots and mobile robots.

Zhao Guo

Wuhan University, professor. The main research includes exoskeleton robots, bionic robots. More than 70 papers have been published in authoritative journals and academic conferences such as Soft Robotics, IEEE Trans. Robotics., IEEE/ASME Trans. Mechatronics, Mech. Mach. Theory, ICRA and IROS, and more than 20 national invention patents have been authorized. He has presided over more than 10 projects, including the key project of the National Key R&D Program "Strategic Science and Technology Innovation Cooperation", the key project of the Basic Strengthening Program (173), the National Natural Science Foundation, and the Hubei Provincial Key R&D Program. He won the second prize of the 2023 China Invention Association Invention and Innovation Award (ranked 1st) and the third prize of the 2023 Third "Yuan Chuang Cup" Innovation and Creativity Competition (ranked 1st). He has been cited more than 1,800 times by Google Scholar, and has been nominated for the best paper awards such as IEEE ICARM and ROBIO 6 times. He serves as the associate editor of the journal Medical & Biological Engineering & Computing. He has guided graduate students to win the first prize in the China Robot Innovation Design Competition many times.

Zhifeng Hao

Zhifeng Hao, President of Shantou University. Prof. Hao is the vice Chairman of the University Mathematics Teaching Committee of the Ministry of Education, Deputy Director of the Big Data, Artificial Intelligence Special Committee of the Chinese Society of Industrial and Applied Mathematics, and Director of the Key Laboratory of Intelligent Manufacturing Technology of the Ministry of Education. Prof. Hao's research focuses on mathematical modeling and applications, data science, smart cities, and other areas. He leads the programs in key research and development projects of the Ministry of Science and Technology, the National "New Century Talent Support Program", the Key Project of National Natural Science Foundation of China, and the Huo Yingdong Foundation. He has won the second prize of the National Excellent Teaching Achievement Award four times, the Excellent Award of the China Patent Award, and the Guangdong Provincial Science and Technology Award. In 2020, he was awarded the title of "Leading Person of Smart City Pioneer List." In 2021, he was awarded the title of "Contemporary Inventor of China".

Ting Han

Professor Han Ting is a professor at the School of Design, Shanghai Jiao Tong University, and a doctoral supervisor. He also holds a dual appointment as a professor at the Institute of Medical Robotics, Shanghai Jiao Tong University. In recognition of his outstanding contributions, he was appointed as a Distinguished Professor under the "Changjiang Scholars Program" by the Ministry of Education in 2022 and has been selected as a recipient of the Shanghai Pujiang Talent Program. Additionally, he has been honored as an Excellent Teacher by Baosteel, a Tang Lixin Outstanding Scholar, and one of the Top Ten Educators in Industrial Design by the China Industrial Design Association. Professor Han serves as a member of the Teaching Guidance Sub-Committee for Industrial Design under the Ministry of Education and as a member of the National Design Professional Degree Graduate Education Guidance Committee.

Aiqun He

Director of Occupational Therapy Department,Guangdong Work Injury Rehabilitation Hospital, chief Therapist.
Research interests:Occupational Therapy.
Academic positions: Vice Chairman of Occupational Therapy Committee of the Chinese Association Rehabilitation Medicine, member of AD and Cognitive Dysfunction Committee of the Chinese Association Rehabilitation Medicine, member of Hand Function Committee of the Chinese Association Rehabilitation Medicine, Chairman of Occupational Therapist Committee of the Guangdong Association Rehabilitation Medicine.
Research achievements: presided over/mainly participated in 7 Provincial Medical Research Fund Projects, published more than 10 academic papers, co-edited/translated and published 6 occupational therapy books, including Occupational Therapy Evaluation, Occupational Therapy for Neurological Diseases, Occupational Therapy Technology, etc.

Chengqi He

Level II Professor, Chief Physician, Postdoctoral Collaborative Supervisor, and recipient of the State Council Special Allowance. Obtained Master's degree in Medicine from Fujian University of Traditional Chinese Medicine in 1997 and was a visiting scholar at Loma Linda University in the United States in 1999. In 2003, he earned his Clinical Doctorate in Surgery (Orthopedics) from Sichuan University.

He Chengqi holds several key positions including Vice President of the Chinese Society of Rehabilitation Medicine, Director-General of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association, Vice President of the Rehabilitation Physicians Branch of the Chinese Medical Doctor Association, Director of the Rehabilitation Medicine Center at West China Hospital, Dean of the Rehabilitation Medicine College, Vice Dean of the Medical Technology College, and Director of the Key Laboratory of Rehabilitation Medicine in Sichuan Province. He also serves as Deputy Director of the Professor Committee at West China Clinical Medical School/Hospital of Sichuan University and Director of the Rehabilitation Medicine Research Institute at West China Hospital.

He has previously held positions such as Vice Dean of the Sichuan University-Hong Kong Polytechnic University Institute for Post-Disaster Reconstruction Management. He has received numerous awards and honors including the Chinese Physician Award, Outstanding Chinese Science and Technology Worker, Baosteel Outstanding Teacher Award, Second Prize of the Ministry of Education for Scientific and Technological Progress, First Prize of Huaxia Medical Science and Technology, First Prize of the Chinese Society of Rehabilitation Medicine for Science and Technology, First Prize of the Chinese Society of Rehabilitation Medicine for Teaching Achievement, and Honorary Professorship from Hong Kong Polytechnic University. He has led one key project from the Ministry of Science and Technology and six projects from the National Natural Science Foundation of China, published 96 first-author and corresponding-author SCI papers, edited or authored 19 educational textbooks and monographs, and served as the chief editor for 13 rehabilitation technology training textbooks.

Chen He

Chen He, Associate Professor at the University of Shanghai for Science and Technology. She received her Ph.D. in Rehabilitation Engineering from The Hong Kong Polytechnic University. Her study interest is prosthetics and orthotics, spinal orthoses, and scoliosis. She published over 10 journal papers. She host three national and provincial-level research projects and participated in three additional national projects. She is a member of the Committee of Rehabilitation Engineering under Shanghai Biomedical Engineering Society, member of International Society of Prosthetics and Orthotics (ISPO), and member of the World Association for Chinese Biomedical Engineers (WACBE). She has been invited to present at international conferences multiple times and has also been responsible for translating and editing the Chinese edition of the journal of International Society of Prosthetics and Orthotics.

Liang He

Prof. Liang He is an Associate Professor of Engineering Science at the University of Oxford and an Official Fellow at Kellogg College. His research focuses on soft robotics, haptic and VR, and wearable robotics, with a particular interest in exploring embodied-AI solutions for healthcare and biomedical applications. He received his PhD in Soft Robotics from Imperial College London. From 2017 to 2020, he was a key researcher in the EPSRC Motion and RoboPatient projects, developing virtual simulators and wearables for medical training. In early 2021, he joined the Oxford Robotics Institute's Embodied Intelligence Program to develop soft-sensing skin for robots working with humans. In 2022, he was elected co-chair of the Research Staff Forum at the MPLS Division and appointed a member of the Research Staff Consultation Group at Oxford. He was also awarded an MPLS Enterprise and Innovation Fellowship and an Ideas2Impact Fellowship from the Saïd Business School. In 2023, he joined the Institute of Biomedical Engineering, Department of Engineering Science at the University of Oxford to establish the Healthcare Biorobotics Lab (HBL). He is also a core member of the academic team at The Podium Institute for Sports Medicine and Technology, leading research in innovative AI for sports medicine to monitor, prevent, and predict movement-related injuries in sports.

Evert Jan Hoogerwerf

Drs. Evert Jan Hoogerwerf is Secretary-General of the Association for the Advancement of Assistive Technology in Europe (AAATE), as well as Secretary-General of the Global Alliance of Assistive Technology Organizations (GAATO). He lives and works in Italy where he coordinates the independent assistive technology research and service delivering team of AIAS Bologna. His research interests are in the social, educational and economic aspects of assistive technology and technology in care. Hoogerwerf contributed actively to the writing of the Global Report on Assistive Technology (WHO/UNICEF, 2022).

Together with David Banes he wrote the Framework for building capacity for assistive technology and alternative augmentative communication for children for UNICEF's Europe and Central Asia Regional Office (UNICEF, 2022).

Other publications include:

-Andrich, R., Mathiassen, N. E., Hoogerwerf, E. J., & Gelderblom, G. J. (2013). Service delivery systems for assistive technology in Europe: An AAATE/EASTIN position paper. Technology and Disability, 25(3), 127-146.

-Hoogerwerf, E-J., Desideri, L., Malavasi, M., Rimondini, M., Donegan (2014). BCI as an emerging assistive technology (AT): the AT professionals' perspective. In G. Grübler & E. Hildt (Eds.) Brain-Computer-Interfaces in their Ethical, Social and Cultural Contexts, Springer, Berlin/Heidelberg: pp. 63-75.

-Hoogerwerf, E.-J. et.al. (2016). Digital inclusion. A white paper. ENTELIS consortium.

-Ferrando M, Hoogerwerf E-J, Kadyrbaeva A. (2019). Qualitative research on the factors affecting transferability of digital solutions for integrated care. International-al Journal of Integrated Care. 2019;19(4):236.

-Hoogerwerf, E-J., Mavrou, K. & Traina, I. (eds.) (2020). The Role of Assistive Technology in Fostering Inclusive Education. Strategies and Tools to Support Change. Routledge.

-Evert-Jan Hoogerwerf et. al. (2022). Towards a Model for the Adoption of Person-Centred Technology in Integrated Care. ICCHP-AAATE 2022 Conference. Proceedings: Open Access Compendium "Assistive Technology, Accessibility and (e)Inclusion" Part II. Page 253-259. Publisher: Association ICCHP, Linz.
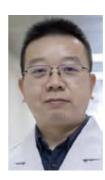
-Hoogerwerf, E., Magni, R., Andrushevich, A., Banes, D. (2023). Towards a Model for the Transfer of Technology-Driven Innovation in Accessible and Inclusive Public Transport In: Studies in Health Technology and Informatics Volume 306: Assistive Technology: Shaping a Sustainable and Inclusive World. Proceedings of the 17th AAATE conference.

-Layton, N., Spann, A., Khan, M., Contepomi, S., Hoogerwerf, E. J., Bell, D., & de Witte, L. (2024). Guidelines for assistive technology service provision – A scoping review. Disability and Rehabilitation: Assistive Technology, 1–12.

Yuichiro Honda

Dr. Yuichiro Honda is an associate professor at Osaka Sangyo University, Osaka, Japan. He obtained his Doctoral degree in engineering from Technische Universi-tät München (Technical University of Munich). He has extensive knowledge in the field of human-machine interfaces, encompassing both hardware and software development, as well as practical applications of assistive technology for persons with disabilities and aging populations. In his role of bridging the gap between technical and clinical aspects, he has participated in numerous needs-oriented projects at the Robot Rehabilitation Center in the Hyogo Rehabil-itation Central Hospital during his previous employment.

Fang Hou

Fang Hou, Ph.D., is the PI of the State Key Laboratory of Ophthalmology and Visual Science, and National Optometry Engineering and Technology Center of the Affiliated Hospital of Optometry and Wenzhou Medical University. His research focuses on the mechanism and modeling of visual information process-ing, as well as precise assessment and rehabilitation of visual functions. His lab was funded by the National Natural Science Foundation of China, the Science and Technology Innovation 2030 - "Brain Science and Brain-inspired Research", and the National Key Technologies R&D Program. He serves as the Guest Associate Editor of Frontiers of Neuroscience and other journals. He is a member of the International Vision Science Society (VSS), a member of the Association for Research in Ophthalmology and Vision (ARVO). He has published more than 40 papers in the fields of ophthalmology and visual science.

Zengguang Hou

Zeng guang Hou is a full professor and deputy director of the State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences (CAS), Beijing. He is also a Key PI of the Center for Excellence in Brain Science and Intelligence Technology (CEBSIT) of Chinese Academy of Sciences (CAS). Dr. Hou's research interests include computational intelligence, robotics and intelligent systems.

He is a Fellow of IEEE and CAA. He is serving as a VP of the Asia Pacific Neural Network Society (APNNS) and Chinese Association of Automation (CAA). Dr. Hou is an associate editor of IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Cybernetics, and Neural Networks, etc. He was on the Board of Governors of International Neural Network Society (INNS). He was the Chair of Neural Network Technical Committee (NNTC) of Computational Intelligence Society (CIS), IEEE. Dr. Hou was a recipient of IEEE Transactions on Neural Networks Outstanding Paper Award in 2013, and the Outstanding Achievement Award of APNNS in 2017, the Dennis Gabor Award of INNS in 2022, and Neural Networks Best Paper Award in 2022. He has over 30 patents on medical devices. He was awarded the Gold Medal of the International Exhibition of Inventions of Geneva 2021 for rehabilitation robots.
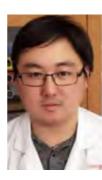
Bingshan Hu

Professor and doctoral supervisor at the Institute of Intelligent Rehabilitation Engineering, University of Shanghai for Science and Technology. Visiting scholar at the University of Hamburg in Germany, Member of the Sports Health and Industry Promotion Special Committee of the Chinese Rehabilitation Medicine Association, member of the Rehabilitation Engineering Special Committee of the Shanghai Biomedical Engineering Society, member of the Shanghai Rehabilitation Medicine Engineering Research Council, co-chairman of the local organizing committee of the first World Rehabilitation Robot Conference, co-chairman of the second Hujiang human-centered robot international conference, and session chair of the 2015 IEEE ROBIO Conference. Engaged in long-term research on intelligent rehabilitation nursing robot technology. As the project leader, I have led 7 national level projects, won 1 first prize of the Science and Technology Award of the Chinese Rehabilitation Medicine Association, published over 50 papers, and applied for or authorized over 40 patents.

Jianmin Hu

MD, Professor, Chief Physician, Doctoral Supervisor, Vice President of the Second Affiliated Hospital of Fujian Medical University, Director of the Fujian Provincial Center for the Prevention and Control of Myopia in Children and Adolescents, and Director of the Fujian Provincial University Engineering Research Center for Assistive Technology for the Visually Impaired.Specializes in the research of retinal diseases and visual impairment rehabilitation. Recognized as a Class B high-level talent in Fujian Province, an outstanding returned overseas scholar, a leading academic figure at Fujian Medical University, and a young and middle-aged expert with outstanding contributions to the health sector in Fujian Province. Serves as an executive committee member of the International Society for Low Vision Research and Rehabilitation, the Vice Chairman of the Clinical Optometry and Eye Health Committee of the Chinese Medical Doctor Association, the Deputy Secretary-General of the Visual Impairment Rehabilitation Engineering and Assistive Technology Committee of the China Disabled Persons' Rehabilitation Association, and the head of the Assistive Technology Professional Group, and the member of the Optometry Group of Ophthalmology Branch of the Chinese Medical Association. Has led over ten national and provincial research projects, including the National Key R&D Plan and the National Natural Science Foundation of China. Has edited and participated in the compilation of several higher medical textbooks for undergraduate and graduate students nationwide. Has led and participated in the formulation of expert consensus on myopia prevention and control in China, as well as clinical guidelines, industry standards, and group standards for low vision. Has published over 30 high-quality papers in journals such as "Nature Medicine" and has been granted multiple patents and software copyrights.

Xuyun Hua

Xuyun Hua, Deputy Chief Physician of the Orthopedic Department at Yueyang Hospital of Integrated Traditional Chinese and Western Medicine, Shanghai University of Traditional Chinese Medicine, received his Ph.D. from the Hand Surgery Department of Huashan Hospital affiliated with Fudan University in 2012. In 2015, he was selected for Fudan University's "Outstanding Scholar Program," and in 2018, he was included in the Shanghai "Medical New Star" Young Physician Training Program. In 2020, he received funding from the Shanghai Talent Foundation Project, and in 2022, he was again included in the Shanghai "Medical New Star" Outstanding Young Physician Training Program.

Currently, Dr. Hua serves as a standing committee member of the Chinese Association of Rehabilitation Physicians' Brain Function Detection and Regulation Professional Committee and Deputy Leader of its Youth Working Group, as well as Vice President of the Medical Robotics Branch of the Shanghai Medical Association. As the principal investigator, he has led two projects funded by the National Natural Science Foundation and one project under the Shanghai Science and Technology Commission's Innovation Action Plan. Additionally, he has been a key researcher in over ten national-level projects, including key R&D plans of the Ministry of Science and Technology and the 863 Program.

Dr. Hua has published over 100 SCI papers, with a total impact factor exceeding 500. His representative works have been published in prestigious journals such as the New England Journal of Medicine, Journal of Neurology Neurosurgery and Psychiatry, Alzheimer Research and Therapy, and Diabetes.

Rongliang Hu

Rongliang Hu, M.D., Chief Physician, Secretary of the Party Branch and Director of the Rehabilitation Medicine Department at Jiangmen Central Hospital, Training Scholar at Fujita Medical University in Japan, Master's Supervisor at Guangdong Medical University, and Director of the National Standardized Training Rehabilitation Medicine Professional Base for Resident Physicians. He has been engaged in clinical, scientific research, and teaching work in the field of rehabilitation medicine for nearly 20 years. He is proficient in language cognitive impairment rehabilitation, botulinum toxin spasm treatment, non-invasive brain regulation techniques, pain rehabilitation, and have conducted in-depth research in the field of neurological rehabilitation. Hosted multiple Guangdong Medical Research Funds, Traditional Chinese Medicine Research Projects of Guangdong Provincial Bureau of Traditional Chinese Medicine, and Guangdong Provincial Health and Family Planning Appropriate Technology Promotion Projects. Published over 20 academic papers in SCI and Chinese journals. Academic Appointment
Member of Speech and Language Rehabilitation Group of the 10th Committee of Physical Medicine and Rehabilitation Society of Chinese Medical Association;
Standing Member of Physical Medicine and Rehabilitation Branch and Community Rehabilitation Branch of Guangdong Medical Association;
Chairman of physical medicine and rehabilitation credit of Jiangmen Medical Association;
Executive director of neurological rehabilitation and director of Severe rehabilitation, Ultrasound interventional Rehabilitation Branch of Guangdong Rehabilitation Medical Association.

Ruiping Hu

Dr. Hu is a chief physician in department of rehabilitation medicine in Huashan Hospital, Fudan University. She served as Secretary-General and Executive Member of Brain Function Testing and Modulation Rehabilitation Committee of the Chinese Association of Rehabilitation Medicine, Chairman of Speech Therapy Committee of the Shanghai Association of Rehabilitation Medicine, Vice Chairman of Brain Function Testing and Modulation Rehabilitation Committee of the Shanghai Association of Rehabilitation Medicine. She has been engaged in research of post-stroke aphasia rehabilitation treatment and non-invasive brain function testing and neuromodulation techniques, including TMS (Transcranial Magnetic Stimulation), tDCS (Transcranial Direct Current Stimulation), and fMRI (Functional Magnetic Resonance Imaging) and her work have been published in Q1 top journal Elife. She has been awarded first Prize of Science and Technology Award of the Chinese Association of Rehabilitation Medicine.

Xiquan Hu

I am M.D., Doctoral supervisor, director of the Rehabilitation Medicine Department of the Third Affiliated Hospital of Sun Yat-sen University and Director of the Management Committee of Lingnan Hospital, leading medical talent in Guangdong Province, chief expert of the National Key Research and Development Program of China. Current I am Vice Chairman of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association, Chairman of the Rehabilitation Evaluation Professional Committee of the Chinese Rehabilitation Medicine Association, Vice Chairman of the Neurorehabilitation Professional Committee of the Chinese Rehabilitation Medicine Association, Standing Committee Member of the Rehabilitation Physician Branch of the Chinese Medical Association, Chairman of the Rehabilitation Physician Branch of the Guangdong Medical Association, Former Chairman of the Physical Medicine and Rehabilitation Branch of the Guangdong Medical Association, Vice President of the Guangdong Rehabilitation Medicine Association and President of the Neurorehabilitation Branch, etc. My research focuses on the rehabilitation of motor, cognitive, and other functional impairments after brain injury, as well as their neural plasticity mechanisms. I have led over 20 scientific research projects at various levels, including 1 National Key Research and Development Program of China and 5 National Natural Science Foundation of China. More than 100 papers have been published, including over 40 SCI papers. I took the lead in writing of "Expert Consensus on Rehabilitation of Cognitive Impairment after Stroke in China". As the first author, won the first prize of the 2018 China Rehabilitation Medicine Association Science and Technology Award and the second prize of the 2021 Guangdong Medical Science and Technology Award. As the chief editor and deputy chief editor, I have compiled 8 monographs/textbooks, including "Rehabilitation Techniques for Neurological Disorders", "Neurorehabilitation", and "Rehabilitation Treatment for Stroke".

Changbing Huang

Chang-Bing Huang received his doctorate degree in Biophysics and Neurobiology from University of Science and Technology of China in 2006 and started postdoctoral training in the Department of Psychology, University of Southern California from early 2007. Huang joined Institute of Psychology, CAS in 2011. The goal of Huang's research program is to construct computational brain models for visual perception and learning in normal and clinical vision. He conducts research on: (1) mechanisms and treatment of eye diseases, e.g. amblyopia, myopia, visual field defects, and aging, (2) psychophysical, imaging, EEG, and computational study of visual perception, perceptual learning, and visual memory, (3) lighting effects and its underlying mechanism(s). He has six patents and dozens of publications in related areas. Huang also co-organized the 1st, the 2nd, and the 3rd China Vision Science Conference (CVSC).

Dongfeng Huang

Professor Dong Feng Huang, MD.
He is currently the Head of the World Health Organization Collaboration Centre for Rehabilitation, Director of Rehabilitation Medicine of The Seventh Affiliated Hospital, Sun Yat-Sen University, Chair of Faculty of Rehabilitation Sciences, Zhongshan Medical School and Chair, Faculty of Rehabilitation Medicine of Xinhua College.
He is also the Dean of the Xinhua Institute of Humanities and Health Sciences, the Director of the Guangdong Engineering and Technology Research Centre for Rehabilitation Medicine and Translation, and the Senior Research Scholar of Rusk Institute of Rehabilitation Medicine, New York University, USA (2010.03. - 2011.03.).
He is the current Director of the Continent of Asia-Australia of International Exchange Committee, International Association of Physical Medicine and Rehabilitation Medicine (ISPRM), the Sixth Executive Director and Deputy Secretary-General of China Rehabilitation Medical Association; the Deputy Director of Rehabilitation Medical Education Professional Committee; Vice-President of Rehabilitation Physicians Branch of China Medical Association; First Chairman of the Chinese Medical Association of Integrated Rehabilitation; Medical Professional Committee of the Association of Joint Medical Sciences; Vice-Chairman of the Pain Rehabilitation Professional Committee of the World Society of Traditional Chinese Medicine; Chairman of the Guangdong Disabled Rehabilitation Association.

Jian Huang

A full professor at Huazhong University of Science and Technology, serves as the head of the Department of Intelligent Science and Technology in the School of Artificial Intelligence and Automation, and the director of the Hubei Key Laboratory of Brain-inspired Intelligent Systems. He has been selected as a leading talent in scientific and technological innovation under the National Special Support Program for High-Level Talents and supported by the Ministry of Education's "New Century Excellent Talent Support Plan," receiving funding from the Hubei Provincial Natural Science Foundation's Distinguished Young Scholars Program. He holds positions such as the chairman of the IEEE Computational Intelligence Society Wuhan Chapter, vice-chairman of the Wuhan Automation Society, and vice-chairman of the Intelligent Robotics Professional Committee of the China Artificial Intelligence Society. He has previously served as a visiting professor at Nagoya University in Japan, a visiting professor at Université Paris-Est-Créteil Val de Marne in France, and a JSPS Fellow funded by the Japan Society for the Promotion of Science.

Professor Huang has led over twenty significant national and provincial-level research projects, including key projects of the National Key Research and Development Program of China, National Natural Science Foundation of China, International Cooperation Key Projects of the Ministry of Science and Technology, and Hubei Province Major Technology Innovation Projects. He has published over 120 SCI-indexed journal articles and has been cited more than 6,000 times on Google Scholar. He holds over 30 national invention patents, one U.S. invention patent, and one Japanese invention patent. His research achievements have been awarded one provincial-level science and technology grand prize (first place), three first-class awards, and one gold and one silver medal at the Geneva International Exhibition of Inventions.

Professor Huang also serves as an editorial board member for internationally renowned journals such as IEEE Transactions on Fuzzy Systems and IEEE Transactions on Automation Science and Engineering.

Weiguang Huo

Weiguang Huo received the Ph.D. degree in signal, image, and automation from the University of Paris-Est, France, in 2016. He is a Full Professor at the College of Artificial Intelligence, Nankai University, Tianjin, China. His research interests include wearable robotics, wearable sensors, human-robot interaction, and neurorehabilitation. He has authored over 30 high-level journal and conference papers in the fields of robotics and rehabilitation engineering, including publications in IEEE TRO, IEEE TNSRE, ICRA, and IROS. He was a Research Associate and Honorary Lecturer with the Department of Mechanical Engineering, Imperial College London, UK. He received the Best Student Paper Finalists in 2018 IEEE ISR and the Best Conference Paper Finalists in 2022 IEEE ICARM.

Prayook Jatesiktat

Dr. Prayook Jatesiktat is a Senior Research Fellow at the Rehabilitation Research Institute of Singapore, Nanyang Technological University (NTU). He received a bachelor's degree in computer engineering from Kasetsart University, Thailand in 2012 and a Doctor of Philosophy from Nanyang Technological University, Singapore in 2019. Since his PhD period, his research work has been in the field of computer perception, computer vision, machine learning, data-driven approach, and human movement tracking technology. Since 2019, he is the main inventor and the development lead of RayKnot, a data-driven markerless multi-camera motion capture system that is currently in used by several international research sites in Singapore, Thailand, Taiwan, Hong Kong, and China to accelerate the research in the field of biomechanics, medicine, and rehabilitation.

Jie Jia

Chief physician, professor, doctoral supervisor, Deputy Director of Rehabilitation Medicine Department of Huashan Hospital Affiliated to Fudan University, PI of National Clinical Medical Research Center for Geriatric Diseases (Huashan), Chief scientist of the "13th Five-Year" National Key Research and Development Plan project. He has presided over more than 20 domestic and international projects, including 1 clinical project of the National Major Natural Research Program integration project, 1 project of the "Twelfth Five-Year Plan" science and Technology support plan of the Ministry of Science and Technology, and the National Natural Science Foundation surface project. Focusing on community rehabilitation, clinical rehabilitation research and new technology equipment research and development of stroke and geriatric multifunctional disorders, multi-system diseases, taking the lead in the "production, study, research and medicine" cooperative research of rehabilitation medicine in China, proposing 5 original stroke rehabilitation concepts and clinical practice, independently developing 13 intelligent upper limb and hand function rehabilitation equipment and clinical transformation. The first to establish a full-cycle "clinical-rehabilitation-nursing" connection process standard and information management platform for common diseases and dysfunction of the elderly, and the relevant results have been promoted and applied in more than 1,000 medical institutions at all levels across the country. More than 20 related monographs have been published, 414 academic papers have been published, 128 have been included in SCI, and 47 patents have been authorized. Founded the hand-function rehabilitation cooperation platform and two wechat public accounts with World Talk for the elderly. He has won more than 20 awards and honorary titles such as the first Prize of National Science and Technology Progress Award and the first prize of Science and Technology Award of Chinese Rehabilitation Medical Association.

Lei Jiang

Chief Scientist of the National and Local Collaborative Humanoid Robot Innovation Center, Leader of the Humanoid Robot Expert Group at the Ministry of Industry and Information Technology, Expert of the "Intelligent Robot" Special Overall Group at the Ministry of Science and Technology, and Expert of the "Integrated Robot" Secretariat Group at the National Natural Science Foundation, has long been engaged in technological research on humanoid robots, quadruped robots, intelligent biomimetic walking, and has led the development of "Qinglong" humanoid robots, 350kg electric yaks, and lunar mobile robots FDTM.

Li Jiang

Professor at Harbin Institute of Technology and Deputy Director of the Institute of Robotics. National level high-level talent, national level candidate for the "Million Talents Project". His research interests include biomechatronics robot, intelligent and dexterous manipulation of robots, medical robots, etc. He has led National Key R&D Program Project, key project of the National Natural Science Foundation of China, project of the National 973 Program, and key project of the National 863 Program. He received 2 second prizes for national technological inventions, 1 second prize for national teaching achievements, and 7 provincial and ministerial level science and technology awards, published 3 academic monographs, published over 250 papers, and authorized and applied for more than 80 national invention patents.

Jing Jin

Jing Jin is a professor and Ph.D. supervisor at East China University of Science and Technology, serving as the Vice Dean of the School of Mathematics. He has been selected into the National High-Level Talent Special Support Program and Shanghai Shuguang Program. He is the specially-appointed professor under the Oriental Scholars of Shanghai Universities and the chief expert of Shanghai Academician (Expert) Workstation. He is listed among China's Highly Cited Researchers. Jin serves as a board member of the International BCI-Award Foundation, vice chair of the Medical Neural Engineering Subcommittee of the Chinese Society of Biomedical Engineering, and a specially-appointed expert of the Chinese Association of Automation. He is also an associate editor for SCI journals such as Journal of Neuroscience Methods, Cognitive Neurodynamics, and Frontiers in Neurorobotics, and an executive editorial board member of the CAS top-tier journal Neural Networks. Additionally, he is on the editorial board of the top-tier journal in brain-computer interface, Journal of Neural Engineering. Jin has received the inaugural Huanao Award for Outstanding Young Scientists, led the team that won the Shanghai Natural Science Second Prize, and earned the Shanghai Worker Pioneer title. His primary research areas include brain-computer interface technology, brain signal processing and recognition, and intelligent rehabilitation robots. He has published over 150 papers in top-tier journals in the field of brain-computer interfaces and CAS top journals, with 12 highly cited papers in ESI and one hot paper. In the past five years, Jin has led more than 20 national and provincial-level projects, including the research project under National Science and Technology Innovation 2030 Major Project and the collaborative unit project for Shanghai Municipal Science and Technology Major Project, as well as National Natural Science Foundation projects. His translational research results have achieved China Medical Device Registration Certification and EU CE certification, and have been nominated for the Austrian National Innovation Award.

Xinlong Jiang

Xinlong Jiang, Ph.D., is an associate researcher and master's supervisor at the Institute of Computing Technology, Chinese Academy of Sciences. His research centers on wearable behavior perception and human-computer interaction, focusing on federated learning and explainable AI algorithms. He has contributed to standards for IEEE Federated Learning (FML) and Explainable AI (XAI). In 2015, Dr. Jiang conducted doctoral research at the University of California, Irvine, on autism intervention for children. He is involved in National Natural Science Foundation projects, Youth Fund, and National Key R&D Program projects. His research has been published in journals such as Cell Patterns, TKDE, TIST, and TOMM, and presented at conferences including ACM Ubicomp and ACM CHI, with over 40 high-level papers. He is listed in the "Beijing Haidian District Expert Database" and has been recognized by the "CAS Youth Promotion Association" talent program.

Phunsuk Kantha

Dr. Phunsuk Kantha graduated with a PhD in Physical Therapy from National Taiwan University in 2023. He is currently a post-doctoral researcher at the Research & Innovation Center of Human Movement Sciences (RICHms), Faculty of Physical Therapy, Mahidol University, Thailand, and at King Chulalongkorn Memorial Hospital, Thailand. His research focuses on clinical rehabilitation. He is the principal investigator of a project using markerless motion capture to determine joint kinematics in patients with knee osteoarthritis and a co-principal investigator of a project funded by the National Research Council of Thailand, which examines cortical excitability in elderly individuals at risk of falling using transcranial magnetic stimulation.

Lingjing Jin

Ling jing Jin is the tenured professor of Tongji University and the president of Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center). He is also the distinguished professor of "Changjiang Scholars" award by Ministry of Education and the chief scientist of national key research and development program, and enjoys special government subsidies of the State Council. He is also a member of the Standing Committee of the International Association of IAPRD, Deputy Editor-in-Chief of NNR, member of the Teaching Steering Committee of Medical Technology in the Ministry of Higher Education, and a member of the Board of Directors of the Chinese Society of Rehabilitation Medicine and Vice-Chairman of the Specialised Committee on Rehabilitation Evaluation, among others. He specializes on the brain science and neurological rehabilitation. He has presided 2 National Key Research and Development Programs, 1 National Major Science and Technology Project, and 7 projects of National Natural Science Foundation of China. He has published 139 papers (79 of which were SCI articles) as the first or corresponding author such as Nat Struct Mol Biol, PNAS, Molecular Psychology, Movement Disorders and npj Parkinson's Disease. He has also authored or participated in 10 books and 15 consensus or guideline publications. Additionally, He has obtained 29 patents and completed 3 conversions. He was awarded the First Prize of Science and Technology Award of Chinese Association of Rehabilitation Medicine, the First Prize of Shanghai Rehabilitation Medicine Science and Technology Award, the Second Prize of Science and Technology Progress Award of the Ministry of Education, and the Youth Award of Shanghai Medical Science and Technology Award. He was also awarded the Outstanding Young Neurologist of the Chinese Medical Doctors' Association, the Shanghai Medical Artisan, the Outstanding Communist Party Member of Shanghai Municipal Education and Work Committee, the May 1st Labour Medal of Shanghai Municipality, the Shanghai Top Ten Doctors, and the Shanghai Young Talents of Medical Science and Technology "Silver Snake Award" and other awards.

Matthias Kienle

Matthias Kienle is the head of MagVenture international business development department. He is also a trainer and supporter for medical systems for diagnostic and treatment in neurology, neurorehabilitation and psychiatry. Matthias had acquired scholarship in "Rehabilitation for Spinal Cord Injuries", School for PT Munich in 2001 and "Neuromonitoring in OR and ICU", TU Munich/UniGraz in 1999 and he was majored in Engineer for Biomedical Technology, University of Giessen in 1993.

Xuguang Lan

Professor of College of Artificial Intelligence and Robotics in Xi'an Jiaotong University. His research interests include computer vision, embodied intelligence, etc. He serves as the director of the Trico-Robot Committee of the Chinese Society of Automation, and a member of a council and deputy secretary-general of the Chinese Society of Cognitive Sciences, and vice director of Intelligent Unmanned System Modelling and Simulation Committee of the Simulation Society, etc.. He has published more than 100 papers in famous journals and conferences in the field of artificial intelligence and robotics, such as IEEE Trans and ICML/CVPR/RSS, and has obtained more than 20 national invention patent authorizations.. He serves on the editorial board of international journals such as IEEE Transactions on Neural Network Learning System, IET "Cognitive Computation and Systems", etc.. He has served as the joint program chair of IEEE CYBER2019 and ICIRA2021 conferences, General Chair of IEEE RCAR2023 and ICIRA2024 conference, and a senior member of IEEE.

Jun Liang Lau

Jun Liang Lau is currently a research fellow at Singapore General Hospital, focusing on robotics & wearable tele-rehabilitation research. He specializes in biomechanics, robotics and wearable sensory systems. He earned his PhD in Engineering Product Development from the Singapore University of Technology and Design (SUTD) in 2021 under the supervision of Associate Professor Gim Song Soh. His doctoral research focused on the biomechanics of human motion and the development of wearable sensors for accurate motion tracking.

For the past two years, Jun Liang has been a part of the Rehabilitation Research Institute of Singapore (RRIS), where he worked on various projects related to human motion capture and wearable technology. His goal is to collaborate across disciplines to create innovative medical products that improve patient treatment and outcomes.

Zhi Lan

Dr. Zhi Lan is a professor in Dept. of Intelligent Control and Systems for Rehabilitation at National Research Center for Rehabilitation Technical Aids, Beijing, China. Currently, he also serves as the vice director of the Key Laboratory of Neuro-functional Information and Rehabilitation Engineering of Ministry of Civil Affairs, and the vice chair of the technical transformation and industrial promotion professional committee of the Chinese rehabilitation medical association.

Prof. Lan's research mainly focuses on intelligent wheelchairs and rehabilitation robots. He is the P.I. of many national research projects, including "Development of Assistive Robots for the Elderly and System Integration" from National Key Research and Development Plan and "Life care and safety monitoring technology and product demonstration" from National High-tech R&D Programs. Prof. Lan has applied for over 50 patents with around 20 approval., He also published nearly 20 research papers, and formulated one national standard.

Yuquan Leng

Dr. Yuquan Leng is a Research Associate Professor at the Southern University of Science and Technology and the Associate Director of the Guangdong Medical Rehabilitation Intelligent System Engineering Technology Research Center. He is the recipient of the prestigious Guangdong Province Distinguished Youth Scholar Award and Shenzhen Excellent Youth Award.

Dr. Leng has been engaging in theoretical, technical, and applied research on wearable robots. He published 86 SCI/EI papers, applied for 93 patent applications (including 66 invention patents), and published two academic books as the first author. Dr. Leng is the lead PI for four national projects and seven provincial/municipal projects. He also received numerous research awards, such as the First Prize of Shenzhen Science and Technology Progress Award, First Prize of Chinese Association of Automation Science and Technology Progress Award, Second Prize of Machinery Industry Federation Science and Technology Award, and so on.

Chong Li

Dr. Chong Li received Ph.D. degree both from Delft University of Technology, the Netherlands in 2016 and Tsinghua University, China in 2017. He joined Department of Mechanical Engineering of Tsinghua University in 2017 as postdoctoral fellow and Assistant Professor in 2019. He is now working as Associate Professor at School of Clinical Medicine of Tsinghua University. Dr. Chong Li's research mainly focus on the direction of biomechatronic engineering for neurorehabilitation, specifically on design novel rehabilitation treatment with neurotechnology and personalized treatment to maximize the efficiency of rehabilitation.

Dr. Chong Li has received grants as PI from key projects from NSFC and MOST. He has published more than 50 scientific papers indexed by SCI/EI, including top-tier journals in the field of rehabilitation, neuroscience, artificial intelligence etc. Dr. Chong Li is serving as Member and Deputy Secretary-general of several academic societies, including Chinese Society of Biomedical Engineering, Chinese Association of Assistive Products, and Chinese Association of Rehabilitation Medicine. He was the only Awardee of the Young Elite Scientist Sponsorship Program by CAST in Chinese Society of Biomedical Engineering in 2019, and he was also the Awardee of Beijing Nova Program in 2023.

Guanglin Li

Dr. Guanglin Li is the full professor of Shenzhen Institutes of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS), China, where he has served as the Director of Shenzhen Institute of Advanced Integration Technology and Research Center for Neural Engineering. Also he has served as the Director of both the CAS Key Laboratory of Human-Machine Intelligence-Synergy Systems at SIAT and the Guangdong-Hong Kong-Macau Joint Laboratory of Human-Machine Intelligence-Synergy Systems, China. He is the founding Chair of Shenzhen Association of Artificial Intelligence. From 2016 to 2019, He was a Senior Research Scientist in the Neural Engineering Center for Artificial Limbs at the Rehabilitation Institute of Chicago and jointly as an Assistant Professor of Physical Medicine and Rehabilitation at the Northwestern University. His current research interests include neuro-rehabilitation engineering, human-machine interaction, rehabilitation robotics, and flexible sensing technologies. As the Principal Investigator, he has been founded by the National Natural Science Foundation of China on Major Scientific Instrument Research Projects and by National Science and Technology Major Project. Dr. Li has authored over 350 peer-reviewed papers published in reputable journals including Nature, Nature Electronics, JAMA, and IEEE transactions with 10400+ citations on Google Scholar, and has 120+ authorized/filed national and international patents. He was listed as the "World's Top 2% Most Cited Scientists" for three times (2020, 2021 and 2023) courtesy of the Stanford University ranking. He was recognized as the Special Allowance of the State Council and as Shenzhen Overseas High-Caliber Personnel (Level A).

Jianan Li

Jianan Li, professor, International associate of the National Academy of Medicine, USA.He is currently the honorary president of the School of Rehabilitation Medicine of Nanjing Medical University and the honorary director of the Rehabilitation Medicine Center of Jiangsu Province Hospital. He serves as the president of the Asia and Oceania Society of Physical and Rehabilitation Medicine, editor-in-chief of the Chinese Journal of Rehabilitation Medicine, vice-chairman of the Chinese Disabled Persons Rehabilitation Association, president of the Rehabilitation Branch of the Jiangsu Association of Social Medical Institutions, and deputy editor-in-chief of the Journal of Rehabilitation Medicine.

Jianjun Li

A second level professor, first level chief physician, doctoral supervisor, and postdoctoral supervisor, enjoys special government allowances from the State Council. The current Dean of the School of Rehabilitation Medicine at Capital Medical University, Director of the Institute of Neurological Injury and Repair at Beijing Institute of Brain Major Diseases, Director of the Beijing Key Laboratory of Neurological Injury and Rehabilitation, Head of National Key Clinical Rehabilitation Specialty, and Editor in Chief of the Journal of Chinese Rehabilitation Medicine Theory and Practice. I have been engaged in clinical, teaching, scientific research, and institutional management work in rehabilitation medicine and rehabilitation for people with disabilities for nearly 40 years. I am committed to professional fields such as spinal cord injury rehabilitation, orthopedic rehabilitation, and sports injury rehabilitation, and have constructed a standardized treatment and rehabilitation system for spinal cord injury in China from four levels: prevention, early rescue, clinical treatment, and rehabilitation.

Has been awarded multiple honorary titles, including the internationally renowned Rick Hansen Foundation and HAIM RING AWARD (ISPRM), the first prize for scientific and technological progress of the Chinese Rehabilitation Medicine Association, the third prize for Beijing Science and Technology Award, the second prize for Beijing Medical Science and Technology Award, the "Top 100 Outstanding Dean of China", and the "Outstanding Contribution Award for Sichuan Earthquake Relief Frontline". Served as the Chief Medical Officer of the Chinese delegation to the 2012 and 2016 Summer Paralympics; Served as the Chief Medical Officer of the Chinese delegation to the 2019 Abu Dhabi Special Olympics; Serve as an expert in ice and snow medical and health security for China at the 2022 Winter Olympics.

Jian Li

Li Jian is doctoral supervisor, interdisciplinary team leader, and Professor of School of Intelligent Engineering and Automation, Beijing University of Posts and Telecommunications. His research interests include robotics, artificial intelligence, and 3D printing. Up to now, he has presided over/participated in more than 10 national, provincial and ministerial projects, such as national key research and development program projects and National Natural Science Foundation projects. Moreover, he has published more than 40 SCI and EI papers, authorized more than 30 national invention patents, and compiled 10 national and industry standards. He is members of the Chinese Digital Orthopedics Professional Committee of the International Society of Orthopedics and Trauma Surgery (SICOT), the Rehabilitation Devices and biomaterials Branch of the Chinese Society of Biomaterials, the Intelligent Vehicle and Robot branch of the Chinese Society of Instrumentation, the Rehabilitation Engineering branch of the Chinese Society of Biomedical Engineering, the editorial board of the China Robot Industry Yearbook 2022, and so on. He has won two Chinese Patent Awards, Beijing Outstanding Youth Backbone, Outstanding Youth of the Ministry of Civil Affairs, the special prize of the first Innovation Design Competition of Rehabilitation Aids, etc.

Kui-cheng Li

OT, Professor, Chief Therapist, MSc(HKPU)
Vice-Dean, School of Rehabilitation Medicine,Weifang Second Medical University
Individual Member and Alternate of WFOT
Prof LI graduated from Tianjin Medical University in 1997, majored in Rehabilitation Medicine. In 2005, he graduated in Clinical Medicine from Sun Yat-sen University. He got his master's degree in Rehabilitation Sciences in the Hong Kong Polytechnic University in 2009.
Before being a full-time teacher in Weifang Medical University, he has worked as occupational therapist and director of OT department in Guangdong Provincial Work Injury Rehabilitation Hospital for 16 years, and worked as vice-president, president for more than 6 years in JORU Rehabilitation Hospital.
Now, he is the president of China Association of Occupational Therapy (CAOT), member of the standing committee in rehabilitation education branch, burn therapy and rehabilitation branch, and the rehabilitation and elderly care working committee under Chinese Association of Rehabilitation Medicine (CARM).

Le Li

Dr. Le Li received the Ph.D. degree from the Hong Kong Polytechnic University, Hong Kong SAR, China, in 2007. He is currently a Professor with the Institute of Medical Research, Northwestern Polytechnical University, Xi'an, China. Prior to joining NPU, he worked as a clinical Researcher (Associate Professor and Professor) with First Affiliated Hospital, Sun Yat-sen University, Guangzhou, China, from 2010 to 2021. His research interests include rehabilitation engineering and biomechanics, particularly in biosignal processing and evaluation (i.e., fNIRS, EMG, EIM), musculoskeletal ultrasound application and neuro- musculoskeletal modeling of normal subjects and persons after stroke.

Luya Li

Ph.D. in Mechanics from Beihang University, worked as a postdoctoral researcher at Beihang University, Hong Kong University of Science and Technology, and Simon Fraser University in Canada. With rich experience and achievements in academic research and industrialization of robotics and intelligent medical devices, he has served as a senior executive in two publicly listed medical device companies in Canada for more than 10 years. Founded in December 2017, Angelexo Scientific is committed to the research, development, and manufacturing of globally leading intelligent medical device solutions and products for neurological and musculoskeletal rehabilitation. Selected for the Zhejiang Overseas Engineer Program, currently serving as a distinguished professor at the Fifth Affiliated Hospital of Zhengzhou University, executive member of the Science and Technology Management and Clinical Evaluation Committee of the Chinese Association of Rehabilitation Medicine, and member of the Expert Committee of the Zhejiang Engineering Research Center for Digital Rehabilitation Equipment.

Qingdu Li

Qingdu Li is a Distinguished Professor under the Shanghai Oriental Scholar Program and a Highly Cited Researcher by Elsevier. He is the founder of Shanghai Droid Robot Company. With academic and professional experiences at Cornell University and the University of Hamburg, he serves on the editorial boards of several international SCI journals. Currently, he holds the position of Executive Dean at the Institute of Machine Intelligence at the University of Shanghai for Science and Technology. For nearly two decades, Li has led his team in pioneering the fundamental theories and key technologies of bipedal humanoid robots. He introduced a passive walking technology combined with artificial intelligence, culminating in the development of the "Xiongzhe No.1" robot, which set a Guinness World Record by walking 134 kilometers on a single battery charge. Additionally, he developed the BEISE series of bipedal robots, acclaimed for their safety, cost-effectiveness, and energy efficiency. Li's research achievements are substantial, including the publication of over 100 SCI papers and securing more than 20 authorized invention patents. He has led or participated in over 20 scientific research projects, earning multiple prestigious science and technology awards.

Sujiao Li

Dr. Sujiao Li, Ph.D., doctoral supervisor, Postdoctoral in Rehabilitation Medicine and Physiotherapy, Deputy Director of the Interdisciplinary Innovation Research Institute at University of Shanghai for Science and Technology (on secondment), Distinguished Researcher at the Intelligent Rehabilitation Engineering Research Institute, Visiting Scholar at the Department of Physical Medicine and Rehabilitation, University of Vienna, Austria. Currently serving as the Secretary-General of the professionnal Committee of Rehabilitation devices of China Rehabilitation Products Association. With over 10 years of research and teaching experience in the field of rehabilitation engineering and intelligent rehabilitation devices. She has led key porjects supported by the National Key R&D Program of the Ministry of Science and Technology, the National Natural Science Foundation of China, and the Shanghai Science and Technology Support Plan. She received awards of the Second Prize of Shanghai Science and Technology Progress, the First Prize of Science and Technology Progress of China Rehabilitation Medical Association, and the First Prize of Teaching Achievement of China Rehabilitation Medical Association. HHer research primarily focuses on neurological rehabilitation assessment and training prescription, rehabilitation robots, and intelligent prosthetics etc. She has published more than 60 papers and filed for over 50 patents.

Wen Li

Member of the China Democratic League.

Associate chief physician and director of the Rehabilitation Medicine Center at the Second Affiliated Hospital of Wannan Medical College.

Youth standing committee member of the Rehabilitation Education Branch of the Chinese Association of Rehabilitation Medicine.

Member of the Alzheimer's Disease and Cognitive Impairment Rehabilitation Committee of the Chinese Association of Rehabilitation Medicine.

Member of the Tele-Rehabilitation Committee of the Chinese Association of Rehabilitation Medicine.

Member of the Science and Technology Management and Evaluation Committee of the Chinese Association of Rehabilitation Medicine.

Youth member of the Trauma Rehabilitation Committee of the Chinese Association of Rehabilitation Medicine.

Member of the Cardiopulmonary Group of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association.

Member of the Physical Medicine and Rehabilitation Branch of the Anhui Medical Association.

Member of the Sports Medicine Branch of the Anhui Medical Association.

Member of the Rehabilitation Branch of the Anhui Medical Doctor Association.

-tanding Committee Member of the Rehabilitation Branch of the Anhui General Medical Association.

Standing Committee Member of the Rehabilitation Branch and the Humanities Branch of the Anhui Health Service Association.

Vice Chairman of the Wuhu Rehabilitation Medicine Association.

Founded the Rehabilitation Medicine Center at the Second Affiliated Hospital of Wannan Medical College in July 2016.

Specializes in early clinical management of severe rehabilitation.

Xiangxin Li

Dr. Li Xiangxin, Ph.D., Associate Professor, doctoral supervisor, Distinguished Research Fellow of the Chinese Academy of Sciences, recipient of the Special Research Assistant Grant from the Chinese Academy of Sciences, and High-Level Talent in Shenzhen. Her research primarily focuses on motor neurophysiological information processing, multifunctional prosthetic control, and applications of flexible sensing materials. As the principal investigator, she has led key projects supported by the Ministry of Science and Technology's Major R&D Program, the National Natural Science Foundation of China, Guangdong Natural Science Fund, and Shenzhen Key R&D Program. She has also been a core member involved in over 10 projects including key international cooperation projects of the Ministry of Science and Technology and defense technology innovation projects. She has published more than 50 papers and filed for over 60 patents.

Zengyong Li

Li Zengyong, Professor, Director of the Rehabilitation Training Assistive Devices Research Department at the National Research Center for Rehabilitation Technical Aids, and part-time doctoral supervisor at Beihang University and Yanshan University. Engaged in long-term research on intelligent rehabilitation technology, Chief Scientist of the National Key R&D Program. More than 10 projects have been undertaken including national key research and development programs, experiments on elderly care under artificial intelligence conditions, international (regional) cooperation projects, and the National Natural Science Foundation of China. 15 national invention patents have been granted and transformed 6 achievements. Over 100 papers have been published. The research results have won the Huang Jiasi Technology Invention Award from the Chinese Society of Biomedical Engineering and the Science and Technology Progress Award from the Chinese Rehabilitation Medicine Association. Currently serving as the Vice Chairman of the Rehabilitation Engineering Committee of the China Rehabilitation Assistive Devices Association, Vice Chairman of the Rehabilitation Engineering Branch of the Chinese Society of Biomedical Engineering & Executive Committee of the Medical Artificial Intelligence Branch, Vice Chairman of the Brain Computer Interface and Rehabilitation Committee of the China Rehabilitation Medicine Association, and Director of the Zhongguan Village Medical Device Alliance.

Zhijun Li

Zhijun Li (Fellow, IEEE) is currently a Chair Professor of Tongji University, China, where he has been the Dean of the School of Mechanical Engineering. He received the Ph.D. degree in mechatronics from Shanghai Jiao Tong University, Shanghai, China, in 2002. From 2003 to 2006, he was a Postdoctoral Fellow at the University of Electro-Communications, Tokyo, Japan, and the National University of Singapore, Singapore. He has published over 400 papers, where the prestigious contributions were wearable robotics and bio-mechatronics systems. He has received the Distinguished Lecturer (RAS), the Web of Science Highly Cited Researcher (2019-2023), the 2018 National Ten-thousand Talents Program in China, the 2016 National Distinguished Young Scholar (NSFC). He is an IEEE Fellow and AAIA Fellow. He is a Member of Board of Governors, IEEE Systems, Man and Cybernetics Society (2023-2025). From 2016, he has been the Co-Chairs of IEEE SMC Technical Committee on Bio-mechatronics and Bio-robotics Systems (B^2S), and IEEE-RAS Technical Committee on Neuro-Robotics Systems. He has been served as Senior Editors of IEEE Transactions on Automation Science and Engineering and Journal of Intelligent & Robotic Systems, and Associate Editors of several IEEE Transactions.

Wei Liang

Researcher,Deputy director of the China Rehabilitation Research Center for Hearing and Speech Impairment.
Editor-in-chief of the Chinese Journal of Hearing and speech rehabilitation.
The sixth director of the hearing and Speech Rehabilitation Committee of the China Disabled Rehabilitation Association, and a lifelong member of HI-IFOS-ISA.
He was an adjunct professor at the East China Normal University Institute of Speech and Hearing Sciences and the School of language rehabilitation, Beijing language and Culture University, hearing aid fitting division national professional skills appraisal expert committee experts, the National Birth Defect Prevention Training Project Expert Group members.
To undertake and participate in a number of national, provincial and ministerial-level scientific research projects. He has written more than 70 professional articles and papers and published more than 30 textbooks and books as chief editor and deputy chief editor.

Wenyuan Liang

Wenyuan Liang is currently an Associate Professor at National Research Center for Rehabilitation Technical Aids. He received his Bachelor's degree in Mechanical Design, Manufacturing, and Automation from University of Science and Technology of China in 2007 and Ph.D. degree in Control Science and Engineering from University of Science and Technology of China & Institute of Intelligent Machines, Chinese Academy of Sciences in 2012. He was a Visiting Researcher at Kagoshima University in 2010-2012. He worked as a postdoctoral researcher at Peking University in 2013-2017. His research interests are focused on rehabilitation robots, surgical robots and collaborative robots, including mechanical design, control theory, human-machine interaction, and rehabilitation theory. Through his work, he aims to integrate motion and sensation to provide solutions on active training for developing rehabilitation robots for such as stroke, and cerebral palsy and on bidirectional closed-loop for developing prosthetic hands with a non-invasive and natural sensory feedback.

Chenye Lin

Mr. Lin is an Associate Professor and Master's Supervisor. He is currently serving as the Deputy General Manager and Design Director of Shanghai Blue Industrial Design CO., LTD. Additionally, he is the Head of the National First-Class Undergraduate Program Construction Site (Product Design) at Shanghai Polytechnic University, the Course Leader of First-Class Courses in Shanghai Municipality, a Director of the China Industrial Design Association, and the Vice President of the Shanghai Industrial Design Association.
With over a decade of experience in design strategy research, design education, and systematic innovation design, he adheres to the design philosophy of "precise positioning, strategic layout, and sustainable empowerment." He practices the systematic innovative design operation model, forging long-term, deep strategic partnerships with several leading brands in China. The enterprises (brands) he has previously served include DELI Group Co., Ltd, SATA (APEX Tool Group), WONLY Group Co., Ltd, Shanghai Electric Group Company Limited, and Shanghai THAN Medical Technology Co., Ltd, among others. He has created multiple exemplars in China where industrial design has propelled enterprises towards success. He has led design projects that have been honored with prestigious design awards, including China Excellent Industrial Design（CEID）, Design Intelligence Award (DIA), iF Design Award, Red-Star Design Award, and Golden-Pin Design Award, as well as multiple national invention patents and utility model patents.

Yuan Lin

Yuan Lin is a professor and doctoral supervisor at the School of Materials and Energy, University of Electronic Science and Technology of China. Dr. Lin is recognized as a Distinguished Professor under the Ministry of Education's CJ Scholar Program and as a Leading Talent in Scientific and Technological Innovation under the National Special Support Program. She has also been awarded the National Science Fund for Distinguished Young Scholars. Her research currently focuses on stretchable and flexible devices based on inorganic functional thin films.

Haijie Liu

M.d., Postdoctoral fellow of Harvard Medical School, USA
Xuanwu Hospital, Capital Medical University, Deputy chief physician of Senior Stroke Unit, Department of Neurology, National Medical Center for Neurological Diseases, is specifically responsible for the construction and implementation of a new model of Very Early Rehabilitation-Stroke Unit based on artificial intelligence. Comprehensive intervention combining stroke drugs and very-early rehabilitation to reduce stroke mortality, complications and disability.
Research direction: Research on "brain-limb-muscle" multi-modal brain-computer interface of stroke based on clinical scenes and patient data, specifically responsible for the work of brain-inspired intelligence medical innovation center. Presided over/participated in 5 national study projects, Presided over sub-task of "Active health and aging technology Response" key project (the Ministry of Science and Technology ,1.9 million), the third prize of the Provincial Science and Technology Progress Award (the second complete person), the first/corresponding author in Scientific Data, Alzheimers Res the-R. He has published more than 10 SCI papers (6 papers in Region 1), and has authorized 14 national patents.

Honghai Liu

PhD in intelligent robotics at King's College London, Member of Academia Europaea, Fellow of IEEE and Fellow of IET. He is interested in human machine interaction for medical systems and applications with an emphasis on approaches that could make contribution to the intelligent connection of perception to action using contextual information. He has authored/co-authored more than 200 per-reviewed journals and conference papers.

Zhengtang Liu

Chief Physician, MD, Postdoctoral Fellow, PhD Supervisor, and Postdoctoral Supervisor. Currently serving as the Deputy Director (Acting Head) of the Geriatrics Department at Xiyuan Hospital, China Academy of Chinese Medical Sciences. Recognized as a National Outstanding TCM Clinical Talent by the State Administration of Traditional Chinese Medicine. Additionally, a Professor and PhD Supervisor at Beijing University of Chinese Medicine and a PhD Supervisor at Macau University of Science and Technology. Holding positions as Deputy Chair of the Geriatrics Branch and Head of the Osteoporosis Study Group of the Chinese Ethnic Medicine Association, Deputy Chair of the TCM Professional Committee of the Alzheimer's Disease Prevention and Treatment Association, and Head of the TCM Group of the Meteorology and Medical Health Special Committee of the China Meteorological Service Association. Also serving as Deputy Chair of the Integrated Chinese and Western Medicine Group of the Neurodegenerative Diseases Professional Committee of the China Microcirculation Society, Deputy Chair of the Health and Elderly Care Innovation Management and Technology Application Professional Committee of the Beijing Hospital Innovation Management and Technology Application Association, and Deputy Chair of the Geriatric Ophthalmology Special Committee of the Beijing Traditional Chinese Medicine Association. Further responsibilities include serving as Executive Director of the China Medicinal Food Research Association, Member of the Endocrinology Group of the Geriatrics Branch of the Chinese Medical Association, Standing Committee Member of the Sleep Disorders Professional Committee of the Chinese Rehabilitation Medicine Association, Standing Committee Member of the Geriatrics Branch of the China Association of Gerontology and Geriatrics, Standing Committee Member of the Geriatrics Branch of the World Federation of Chinese Medicine Societies.

Zhonglei Liu

Zhonglei Liu, a teacher at the School of Mechanical and Electrical Control Engineering at Beijing Jiaotong University, specializes in the design and precision manufacturing of intelligent equipment. He has been engaged in research and achievement transformation related to the design and manufacturing of intelligent equipment for a long time, accumulating rich relevant experience. He has extensive practical experience in the institutional design and analysis of robots, as well as the productized development of robotics technology. He has engaged in systematic development work on dexterous feet, full-process rehabilitation robots, exoskeleton robots, and humanoid robots, and is familiar with the entire development cycle of complex electromechanical products, from argumentation, research and development, design, manufacturing to productization. He is good at complex electromechanical product development that starts from market needs as well as integration of production supply chains. He has a lot of successful experience in developing low-cost practical products. In recent years，he has focused on shape-function integration design and manufacturing of medical devices for clinical scenarios. And the application of embodied intelligence technology in rehabilitation training of stroke patients is also the focus of research.

Xiandan Liu

Liu Xiaodan, M.D., serves as a Distinguished Professor and a doctoral/postdoctoral mentor in Shanghai University of Traditional Chinese Medicine. She is the Deputy Dean of the School of Rehabilitation Medicine at Shanghai University of Traditional Chinese Medicine, the Executive Dean of Modern Rehabilitation Industry College. She is selected for the Shanghai Oriental Talent Program, Shanghai Health Discipline Leader, and Shanghai Curriculum Ideological and Political Teaching Master. She mainly engages in teaching, research, and clinical work in the field of Chinese Integrative Medicine for cardiopulmonary rehabilitation and occupational treatment of common diseases. In the past 5 years, she has led 3 National Natural Science Foundation projects, published over 60 academic articles, including 35 SCI articles. She is also the national first-class undergraduate program leader in rehabilitation occupational therapy and rehabilitation therapy, and the WFOT international certification leader; Edited one National 14th Five Year Plan textbook, 2 industry planning textbooks, and 4 academic monographs; Won 2 first prizes of Shanghai Teaching Achievement Award, 1 first prize of China Rehabilitation Medicine Association Teaching Achievement Award, and 1 second prize of China Rehabilitation Medicine Association Science and Technology Award. She holds the position of Vice Chairman of the Community Rehabilitation Work Committee and Vice Chairman of the China Occupational Therapy Association of the Chinese Association of Rehabilitation Medicine.

Xiaoyu Lou

Technologist-in-charge，holds the master's degree from Duquesne University United States and is currently the head of occupational therapy at the Neurological Rehabilitation Center of Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center). In 2023, after strict selection, she was awarded the honorary title of "Outstanding Young Rehabilitation Therapist of the Chinese Association of Rehabilitation Medicine". At the same time, she is a member of the Artificial Intelligence Occupational Therapy Group of the Chinese Rehabilitation Medical Association, a member of the 1st Occupational Therapy Committee of the Shanghai Medical Association, and the secretary of the 1st Rehabilitation Assistive Devices Professional Committee of the Shanghai Association for the Rehabilitation of the Disabled. In various innovation competitions in the field of rehabilitation, she won the championship of the 4th China Rehabilitation Talent Creativity Competition, the champion of the 2nd Occupational Therapy Innovation and Entrepreneurship Competition, the first prize of the 7th International Occupational Therapy Symposium Innovation Competition, and the third prize of Science and Technology of the Chinese Association of Rehabilitation Medicine in 2023.

In the field of academic research, in recent years, she has published a total of 5 papers in the design of personalized assistive devices for aging patients with neurological diseases, demonstrating profound academic skills and clinical practice experience. At the same time, she presided over and participated in three provincial and ministerial projects, and made positive contributions to promoting research and development in the field of rehabilitation medicine.

In terms of innovation, in recent years, she has obtained 1 invention patent and participated in a total of 19 patented inventions, fully demonstrating her innovation ability and technical strength in the field of rehabilitation. Her areas of expertise include geriatric rehabilitation, personalized assistive device research and design, and rehabilitation patent development and design, which provides strong technical support and talent guarantee for the development of rehabilitation medicine.

Jiani Lu

Jiani Lu, Deputy Director of Occupational Therapist, is currently the Director of the Rehabilitation Therapy Department of Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center)/Yangzhi Rehabilitation Hospital Affiliated to Tongji University, a standing member of the Occupational Therapy Professional Committee of the Chinese Rehabilitation Medical Association, the deputy leader of the Youth Working Group of the Occupational Therapy Professional Committee of the Chinese Rehabilitation Medical Association, a member of the Rehabilitation Therapy Group of the 12th Committee of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association, and the vice chairman of the Occupational Therapy Professional Committee of the Shanghai Rehabilitation Medical Association. He is a member of the 1st Community Rehabilitation Professional Committee of the Shanghai Rehabilitation Association for Disabled Persons, and an individual member of the World Federation of Occupational Therapists. He has presided over and participated in 4 provincial, ministerial and bureau-level projects, 8 books as deputy editor-in-chief and co-editor, 2 works as chief translator/deputy chief translator, and published more than 10 papers. He has won 3 third prizes of science and technology of Chinese Rehabilitation Medical Association and 3 third prizes of science and technology of Shanghai Rehabilitation Medical Association; He has been awarded the Outstanding Young Therapist of the Chinese Association of Rehabilitation Medicine and the Outstanding Rehabilitation Therapist of Shanghai. He is good at the comprehensive rehabilitation treatment of patients with functional disabilities, has certain clinical experience in promoting the rehabilitation training of upper limb and hand function of patients with various diseases, is good at using braces and assistive devices, and pays attention to the professional and social return of patients with functional disabilities.

Rongrong Lu

Medical Doctor, Associate Chief Physician of the Department of Rehabilitation Medicine, Huashan Hospital affiliated to Fudan University, Senior Research Scholar of the Global Clinical Research Training Program at Harvard Medical School, Visiting Scholar of NHNN. Member of the Youth Group of the Therapeutic Professional Committee of the China Rehabilitation Medical Association and Neuromodulation and Rehabilitation Group of the Brain Function Detection and Regulation Rehabilitation Committee. She also in charge and participates in several research programs. She has published more than 10 papers as the first author or corresponding author, of which 7 are indexed in SCI/EI. She has also participated in the translation of 3 rehabilitation monographs. She especially interested in the applications of non-invasive neuromodulations in acquired brain injury and spinal cord injury.

Devi De Luca

Ms Devi De Luca completed her studies in India at the University of Mysore and the Osmania University & C.C M.B. which then led to a position at the Kolar Medical College as a technical instructor. After joining Delsys Inc. in 2002 as the Head of Global Sales and Operations, Ms De Luca spearheaded business expansion around the world whilst advocating for the use and application of electromyography (EMG). From 2016-2023, Ms De Luca served as the CEO of Delsys Inc. and led the company through a period of unprecedented growth, overseeing a wide range of product releases and pushing a new era of technology innovation through the broadening portfolio of wireless physiological sensors. Ms De Luca now holds the joint roles of Executive Chair and Head of Sales at Delsys Inc. and continues to drive market growth with a key focus on Asia as Delsys increases its commitment to science with education and resources to support the flourishing economies of Asia and young researchers.

Jingjing Luo

Jing jing Luo is a Researcher Fellow, at the Institute of AI and Robotics, Academy of Engineering and Technology, Fudan University. Her research focuses on health informatics, intelligent science, and medical robotics, with a particular emphasis on self-supervised learning, domain adaptation, and fine-grained learning in health information processing. She has led multiple projects on intelligent interactive medical robots, developing prototypes such as flexible bronchoscope intubation robots, brain-computer interface hand rehabilitation robots, bionic pulse diagnosis robots, and intelligent traditional Chinese medicine diagnostic devices. Her work has resulted in over 20 national patents, one international invention award, and more than 30 publications in journals like IEEE Review in Biomedical Engineering, IEEE Journal of Biomedical and Health Informatics, and IEEE Sensors Journal, as well as conferences like ISCAS and ICASSP.

Dengwei Ma

Ma currently holding a doctoral degree and a senior engineer, has served as a lecturer at the People's Liberation Army Information Engineering University. He is currently the Chief Technical Engineer of Henan Xiangyu Medical Equipment Co., Ltd., Deputy Director of the National Enterprise Technology Center, Executive Member of the Digestive Committee, Home Rehabilitation Committee, and Science and Technology Management and Evaluation Committee of the Rehabilitation Branch of the Chinese Medical Association, Off campus Graduate Supervisor for Mechanical Engineering at Zhongyuan Institute of Technology, Honorary Director and Chief Expert of the Rehabilitation Research Institute at Zhengzhou Vocational Health and Health College; Undertake and participate in 2 national, 5 provincial, and 2 municipal key projects; As the main contributor, I have won 2 first prizes of the Science and Technology Award of the Chinese Rehabilitation Medicine Association, 1 first prize of the China Science and Technology Industrialization Award, 1 first prize of the 5th National Equipment Management and Technology Innovation Achievement Award, and 2 other provincial and municipal awards; Obtained over 20 patents as the main inventor

Zeping Lv

Chief Physician of Department of Neurology, Director of Rehabilitation Hospital, National Research Center for Rehabilitation Technical Aids, Deputy Secretary of Party Committee, Head of Advanced Cognitive Center, Director of Beijing Key Laboratory of Rehabilitation Technical Aids for Old-Age Disability, and the second session of the Beijing Yicheng Leading Talent in Medicine and Health. In recent years, he has undertaken two national key research and development programs related to multimodal cognitive function assessment and cognitive rehabilitation, and has won six provincial and ministerial-level scientific and technological progress awards. He is also the supervisor of the Chinese Rehabilitation Medical Association, the honorary chairman of the Special Committee for Alzheimer's Disease and Cognitive Impairment Rehabilitation of the Chinese Rehabilitation Medical Association, the author of the special guide for major chronic diseases of the Ministry of Science and Technology for the 13th Five-Year Plan, the consulting expert in the field of health and elderly care of the Ministry of Science and Technology, the expert of scientific and technological talent evaluation of the China Association for Science and Technology, and the executive editorial board of the Chinese Journal of Neuroimmunology and Neurology.

Chuizhou Meng

Dr Chuizhou Meng is a professor in Mechanical Engineering at Hebei University of Technology, awarded the National-Level Young Talent title. He received Bachelor and PhD degrees in Physics from Tsinghua University, and did postdoctoral research in Biomedical Engineering at Purdue University (US) and served as senior engineer at IBM Semiconductor Research and Development Center (US). He is currently a research leader at the Engineering Research Center for Intelligent Rehabilitation Devices and Detection Technology of the Ministry of Education and the Key Laboratory of Robot Perception and Human-Machine Interaction of Hebei Province. His research focuses on the development of new sensitive materials and flexible sensor devices as well as their application in anti-pressure-induced ulcer bed, multifunctional intelligent pillow, humanoid hugging/carrying robot, flexible assistive exoskeleton, etc. So far, he has published more than 70 SCI papers with a total citation of nearly 5000 times, 7 papers awarded as Highly Cited Paper. He has also authorized 9 US patents and 15 Chinese patents. He is the project leader of the National Key Research and Development Program, and has undertaken several national and provincial key research programs with a total funding of over 10 million RMB. He has elaborated with many domestic high-tech companies in the health and nursing equipment field, and has participated in the application development of several intelligent equipment products, generating great economic and social benefits.

Jianjun Meng

Jianjun Meng is an associate professor at Shanghai Jiao Tong University (SJTU). He studied Mechanical Engineering and earned a Bachelor's and Ph.D. degree at SJTU. He did post-doctoral research at Both the University of Minnesota and Carnegie Mellon University, USA, from 2014 to 2019. He is a senior member of IEEE and an associate editor for Frontiers in Human Neuroscience. He is the PI for the general program of the National Natural Science Foundation of China, co-PI for the National Key Research and Development Program of China. He has received awards, including the First Prize for China's Natural Science of the Ministry of Education, and has been selected in the Shanghai Pujiang Program Class A. His research interests focus on noninvasive BCI, neural prosthetics, and neural engineering. He is the author or co-author of over 40 scientific SCI-indexed journal publications including Science Robotics, National Science Review, NeuroImage, and IEEE Trans. On BME, etc. He co-authored an academic book chapter in "Neural Engineering".

Qiaoling Meng

Ph.D., is a Full Professor at the University of Shanghai for Science and Technology. She currently serves as the Director of the Neurorehabilitation Robotics Laboratory at the Shanghai Engineering Research Center of Assistive Devices. She also serves as a standing committee member of the Technical Committee on Application of Rehabilitation Assistive Devices and as the Executive Secretary-General of the Rehabilitation Robot Alliance, Chinese Association of Rehabilitation Medicine. Additionally, she holds the position of Secretary-General for the China Rehabilitation Robot Forum and is the Program Chair for both i-CREATe & WRRC2024. Her main research interests include neurorehabilitation robotics, exoskeleton robots, intelligent prosthetics, and intelligent mobile robots. She has published several books, including 'Introduction to Rehabilitation Robotics' and 'Design of Upper Limb Rehabilitation Robots'.

Lin Meng

Lin Meng is currently working at the Faculty of Medicine, Tianjin University. She serves as dean assistant of the Faculty of Medicine, PI of the National Key Laboratory of Advanced Medical Materials and Medical Devices, deputy director of Computer Interactive Rehabilitation Engineering Technology Center, standing committee member of the Rehabilitation Engineering Branch of the Chinese Society of Biomedical Engineering, etc. Her research interest concerns the neuro-motor control mechanisms with engineering applications of medical rehabilitation assistance robots, the development of novel technologies for clinical quantitative assessment of neuromotor function, and active movement reconstruction. She has directed 14 research projects, including the national key R&D projects, the National Natural Science Foundation, key national defense science and technology projects, etc. In the last five years, she has published 42 articles as the first/corresponding author in highly recognized journals such as IEEE TBME, IEEE TNSRE, and JNE. She has applied for and granted 21 China invention patents, 2 computer software copyright registration certificates, and 2 design patents. She developed a brain-controlled lower limb hybrid walking exoskeleton robot and participated in developing the "Shen Gong" series of artificial neural rehabilitation robot system. She won the second prize of the National Teaching Achievement Award, the Special Prize of the Society for Scientific and Technological Progress, and the Tianjin "131" Innovative Talent.

Youjiang Min

Min You Jiang, male, Doctor of Medicine, professor, chief physician. He is a master's and doctoral supervisor, and also discipline leader in Traditional Chinese Medicine at Nanchang University of Traditional Chinese Medicine. He often had long-term clinical treatment and mechanistic research in TCM, acupuncture and rehabilitation for spinal cord injury.

In the past five years, Dr. Min has led 2 national-level research projects and 2 provincial / ministerial-level research projects, plus published 15 papers, including 4 SCI papers.

Dong Ming

Professor Dong Ming, Vice President of Tianjin University, Chair Professor. He was a winner of Distinguished Young Scholars of the National Nature Science Fund, National Special Support Plan for High-level Talents, young and middle-aged scientific and technological innovation leading talents of the Ministry of Science and Technology. He serves as member of the Science and Technology Committee of the Ministry of Education and holds prestigious positions including Director of the National Health and Medical Big Data Research Institute, Director of the Intelligent Medical Engineering Research Center at the Ministry of Education, and Executive Director of the Haihe Laboratory of Brain-Computer Interaction and Human-Machine Integration. He is also a Life Member of the International Functional Electrical Stimulation Society (IFESS), the Vice Chairman of the Chinese Society of Biomedical Engineering, and the Vice Chairman of the Brain-Computer Interface and Brain-like Intelligence Professional Committee at the China Standardization Association. Prof. Ming's research expertise concerns the foundational theories and critical technologies of intelligent human-machine interaction. He has also advanced substantial engineering applications of intelligent systems. He has directed over twenty research programs funded by the National Key R&D Program and the National Natural Science Foundation of China. He has been granted over a hundred of national and international patents and software copyrights.

Yoshifumi Morita

Received the M.S. degree and the Ph.D. degree in Electrical and Computer Engineering from Nagoya Institute of Technology in 1989 and 1998, respectively. From 1989 to 1991, he worked at DENSO Corporation, Aich, Japan, where he was engaged in development of Electronic Engine Control Unit. From 1991 to 2000, he was with the Department of Electronic Control Engineering, Gifu National College of Technology as a research associate. In 2000, he moved to the Department of Electrical and Computer Engineering at Nagoya Institute of Technology, where he is currently a professor. From 2016 to 2018, he was a deputy director of the Center for Social Contribution and Collaboration at Nagoya Institute of Technology. He served as College Director and Department Head at Nagoya Institute of Technology.

His current research projects include: Training and testing robots & devices for hemiplegic patients after stroke, treatment device for lower back pain by a proprioceptive approach, robotic educational device of knee joint movement, and so on. His team collaborates with numerous external researchers and specialists, significantly enriching the research conducted. Collaborators include medical doctors, physiotherapists, occupational therapists, manufacturing engineers and many others. Currently, with support from the project "Research and development of frailty prevention and recovery support system using multisensory ICT", funded by "Knowledge Hub Aichi", the Priority Research Project IV from Aichi Prefectural Government and the JSPS Grant-in-Aid for Scientific Research (22H03973), he is actively involved in the development of cognitive training devices focused on hand dexterity and screening devices for mild cognitive decline focused on motor learning of hand dexterity. He is a member of the Institute of Electrical and Electronics Engineers (IEEE), the Robotics Society of Japan (RSJ), the Society of Instrument and Control Engineers (SICE), the Institute of Electrical Engineers of Japan (IEEJ), the Japanese Society for Wellbeing Science and Assistive Technology, and so on.
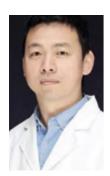
Inhyuk Moon

Dr. Moon received the B.E. and M.E. degrees in electronics engineering from GNU, Jinju, Korea, in 1992 and 1994, respectively, and the Ph.D. degree in computer controlled mechanical systems from Osaka University, Osaka, Japan, in 1999. From 2002 to 2005, he was a team leader of the electronic-control laboratory at the Korea Orthopedics and Rehabilitation Engineering Center (KOREC), Incheon, Korea. Since 2005 he joined the Department of Robot and Automation Engineering, Dong-Eui University, Busan, Korea. He was the President of RESKO (Rehabilitation Engineering and Assistive Technology Society of Korea) in 2018, and the President of KSB (Korean Society of Biomechanics). Currently he is a Vice-President of KORERO (Korean Society of Rehabilitation Robot).

He has been working as the convener of ISO TC173/SC1/WG10 (Electric wheelchairs) and ISO TC173/WG1 (Assistive products for walking), and as a project leader of ISO TC299/JWG5 (Medical robot), ISO TC168/WG3 (Testing for prosthesis and orthosis), and IEC TC62D/WG36 (Medical robot for rehabilitation). He was the project leader of ISO 5363 (Test methods for exoskeleton-type walking RACA robots).

His research interests include rehabilitation robotics, assistive technologies, bio-mechatronic system design, and standardization in rehabilitation fields.

Wenxin Niu

Dr. Wenxin Niu, the executive director of the Intelligent Rehabilitation Research Center of Tongji University School of Medicine, the Distinguished Professor and the director of the Translation Research Center of the Shanghai Yangzhi Rehabilitation Hospital (Shanghai Sunshine Rehabilitation Center); the doctoral supervisor of the Shanghai Research Institute for Intelligent Autonomous Systems; Deputy director of the Key Laboratory of Intelligent Rehabilitation Aids and Technology of Shanghai Disabled Persons' Federation; Head of the Intelligent Medical Production-Education Integration Platform of the National University Science Park; Member of the National Biomechanics professional committee; Member of the Rehabilitation Engineering professional committee, vice chairman and Secretary General of the Biomechanics professional committee of Shanghai Society of Theoretical and Applied Mechanics, and vice chairman of the Sports Biomechanics professional committee of Shanghai Society of Sports Sciences. The research direction is biomechanics and rehabilitation engineering. As the project leader, he has undertaken national key research and development plan projects and 4 National Natural Science Foundation projects, published more than 100 SCI papers, won the first prize of the Natural Science and Technology Award of the Ministry of Education, the first prize of Huang Jiasi Biological Medicine Engineering Award, the first prize of the Science and Technology Award of the Chinese Association of Rehabilitation Medicine, and the first prize of the Shanghai Rehabilitation Medicine Science and Technology Award. He has been shortlisted in the Top 100 of the National Rehabilitation Medicine Academic Influence for two consecutive times.

Yohei Otaka

Yohei Otaka MD, PhD

Professor and Chairman of Department of Rehabilitation Medicine, Fujita Health University, Aichi, Japan
Director, Fujita Health University Nanakuri Memorial Hospital, Mie, Japan
Vice President of the Japanese Association of Rehabilitation Medicine

Dr. Otaka received his MD from Keio University School of Medicine in 1997. He completed a residency in Rehabilitation Medicine at Keio University Hospital. After he worked as a rehabilitation physician at several rehabilitation facilities in Japan, including Murayama Medical Center, Hyogo Medical College, Keiyu Orthopedic Hospital, and Tokyo Rehabilitation Hospital, Dr. Otaka was appointed Associate Professor of the Department of Rehabilitation Medicine at Fujita Health University in 2017. In 2019, he was appointed as Director of Research Center for Robotic Smart Home & Activity Assistive Technology as well as Professor and Chairman of the Department of Rehabilitation Medicine at Fujita Health University. In 2024, he was appointed as Hospital Director of Fujita Health University Nanakuri Memorial hospital, which is one of the teaching hospitals of Fujita Health University.

Dr. Otaka serves on the board of directors of various academic societies, including the Japanese Association of Rehabilitation Medicine (vice president), the Japanese Association of Rehabilitation Medicine for Children (vice president), the Japanese Society for Fall Prevention (vice president), the Japanese Society for Neural Repair and Neurorehabilitation, the Japan Coma Society, the Society of Digital Transformation for Rehabilitation Medicine, and the Japanese Society of Child Neurology.

Dr. Otaka's clinical and research interests are in the areas of stroke rehabilitation, robotics, fall prevention, community-based rehabilitation, and dementia. In particular, he focuses on the use of exercise/activity as a treatment, and on the use of robotics and technologies in rehabilitation medicine. He has received many competitive funds, especially, he has been involving Cross-ministerial Strategic Innovation Promotion Program (SIP) from 2023, which is a national program led by the Council for Science, Technology and Innovation of the Japanese Government with interdisciplinary management to realize scientific and technological innovation. He has authored or coauthored 175 peer-reviewed English papers and 48 book chapters, and also conducted numerous collaborative researches with industries and holds 14 patents.

Tingrui Pan

Professor Pan Tingrui is a Fellow of the American Institute for Medical and Biological Engineering (AIMBE) and the Royal Society of Chemistry RSC, and a Yangtze River (Changjiang) Scholar Chair Professor of the University of Science and Technology of China (USTC). Prior to his current position, Professor Pan was a tenured Full Professor of the Department of Biomedical Engineering at the University of California, Davis, where he founded the Micro-Nano Innovations (MiNI) Lab and served as the Principal Investigator since 2006. In 2009, Prof. Pan initiated the Global Research Experience in Advanced Technologies (GREAT) Program and served as the Faculty Director. Between 2013-2016, Prof. Pan directed the Center for Nano and Micro-Manufacturing (CNM²) of the University of California. He also served on the editorial boards of IEEE Transactions on Biomedical Engineering (TBME) and Annals of Biomedical Engineering (ABME), two flagship journals of biomedical engineering society. He co-chaired the US Contest of Applications in Nano/Micro Technologies (uCAN) and served as a review panelist of the National Science Foundation (NSF). His group has authored over 100 referenced journal and conference publications on high-impact journals such as Nature and Science-series journals, Advanced Materials, Lab Chip, and Biomaterials, and has been granted with more than 20 international patents. Notably, Professor Pan's group has invented the world-first flexible iontronic sensor (FITS), as the latest modality of tactile sensing technology (Lab Chip, 2018, pp.217-248, and Adv Mater, 2020, 2003464, pp.1-25), and successfully translated it from a laboratory prototype to a series of medical and industrial products. For his contribution to both academic innovation and scientific translation, Professor Pan has received numerous international awards and domestic recognitions, including the National Science Foundation (NSF) Early Career Development (CAREER) Award and Emerging Frontiers in Research and Innovation (EFRI) Award, Xerox Award, the CES Innovation Award.

Yu Pan

PhD. of Rehabilitation Medicine, Chief Physician, Director of Rehabilitation Medicine Department, Beijing Tsinghua Chang Gung Hospital. She has profound experience in neurological rehabilitation, rehabilitation of spinal cord injury, rehabilitation of lymphedema, and rehabilitation of chronic musculoskeletal pain. She presided over the subjects of Outstanding Talents of the Beijing Natural Science Foundation and Ministry of Organization and independent research and development projects of Tsinghua University. She has published dozens of papers and edited six books. At present, she is the Member of the Standing Committee of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association and Head of the Neurological Rehabilitation Group, Member of the Lymphedema Group of the Plastic Surgery Branch of the Chinese Medical Association, Member of the China Society of Rehabilitation Medicine, Executive Director of Beijing Rehabilitation Medicine Association, Professional Committee of Spinal Cord Injury of Beijing Rehabilitation Medical Association, Member of the Musculoskeletal Specialist Committee of the Rehabilitation Physician Branch of the Chinese Medical Doctor Association, Standing Director of the Rehabilitation Professional Committee and Cancer Rehabilitation Professional Committee of the World Federation of Chinese Medicine Societies (WFCMS), Member of the Physical Medicine and Rehabilitation Branch of Beijing Medical Association, Member of Beijing Rehabilitation Quality Control and Improvement Committee , and Evaluation Expert of the Beijing Natural Science Foundation.

James L. Patton

James L. Patton received BS mechanical engineering & engineering science from University of Michigan (1989), MS in theoretical mechanics from Michigan State (1993), and PhD biomedical engineering from Northwestern University (1998). He is Professor of Bioengineering at University of Illinois Chicago, and research scientist at the Shirley Ryan AbilityLab. He worked in automotive manufacturing and nuclear medicine before discovering control of human movement. His interests include robotic teaching, controls, haptics, modeling, human-machine interfaces, and technology-facilitated recovery from a brain injury. Patton is vice president of conferences for the IEEE-EMB society, and Associate Editor of IEEE Transactions on Biomedical Engineering, and Medical Robotics and Bionics.

Zhifeng Peng

Master of Business Administration from LINCOLN UNIVERSITY, Master of Law from the PSCCC, EMBA from Cheung Kong Graduate School of Business, Senior Engineer of National Informatization Project, Outstanding Figure in Scientific and Technological Innovation in China, High-level Talent in Digital Economy in Longhua District, Shenzhen.
Peng is currently the chairman of Shenzhen Zuowei Technology Co., Ltd., and he used to be the general manager of Shenzhen Guarder Technology Co., Ltd. and Guangzhou Unikiton Medical Technology Co., Ltd.

Monica A. Perez

Professor Monica is an internationally renowned expert in spinal cord injury research, currently leading a team focused on translational research at Shirley Ryan AbilityLab, dedicated to utilizing state-of-the-art methods to evaluate and enhance motor function.
Professor Perez is renowned for her rigorous scientific methods and profound insights into human neurophysiology, and her research findings have been widely applied to guide the development of therapeutic interventions. She innovatively developed new experimental treatment methods aimed at stimulating cortical and spinal plasticity in individuals paralyzed by spinal cord injury. These studies not only help to reveal the signal transmission mechanisms in cortical and spinal neuronal circuits during exercise, but also provide important theoretical basis for the development of targeted neurorehabilitation therapies.
As a member of the funding review department of the National Institutes of Health and the Department of Veterans Affairs, Professor Perez's research project has been funded by the National Institutes of Health and the Department of Veterans Affairs since 2007. She also serves as the editor in chief of Topics in Spinal Cord Injury Rehabilitation (the official journal of the American Spinal Cord Injury Association), editor of Journal of Neurophysiology, and has published several important articles on motion control and spinal cord injury rehabilitation in high impact peer-reviewed journals such as Brain, Cerebral Cortex, Current Biology, Annals of Neurology, Elife, Journal of Neuroscience, Journal of Physiology, and Journal of Neurophysiology.

Jose L. Pons

Dr. Pons is Scientific Chair at the Shirley Ryan AbilityLab, formerly the Rehabilitation Institute of Chicago, and Professor of Physical Medicine and Rehabilitation, Biomedical Engineering and Mechanical Engineering at Northwestern University, with a long-standing history of collaboration with physicians in physical medicine and rehabilitation. He has authored more than 200 peer-reviewed articles and is best known for his work in wearable robotics and neuroprosthetics as applied to patients with spinal cord injury, stroke and Parkinsonism. He has developed methods for studying balance and tremor in patients with Parkinson's disease and essential tremor; created robotic manipulators and mobility devices for children with cerebral palsy; modified computer cursors for patients with limited mobility; and developed movement sensors for patients who have lost limbs through amputation. The depth of his expertise in physics has enabled him to perform fundamental analyses of devices and movement patterns that are generally applicable to any movement disorder. An expert advisor for science agencies in seven countries, Dr. Pons also serves as associate editor for several journals, including Frontiers in Neurology and various Institute of Electrical and Electronics Engineers (IEEE) publications.

Lei Ren

Prof. Lei Ren researches in the field of biorobotics and bionic healthcare by exploring the fundamental musculoskeletal, neuromuscular and sensorimotor principles underlying human movement, whilst developing bioinspired humanoid robots and healthcare devices, and innovative bionic soft actuation and sensing techniques based on the learnt biological principles. He has been the PI and Co-I of over 40 research projects funded by NSFC, MoST, UK EPSRC, BBSRC etc., and has over 320 peer-reviewed journal papers and has been awarded over 260 patents. His research works have been reported by Nature, Science News, BBC etc. He is the standing vice President of the International Society of Bionic Engineering (ISBE), sits in the Council of Chairs, Biomedical Engineering Society (BMES), and serves as the General Secretary of IFToMM UK. He is the associate editor-in-chief of Journal of Bionic Engineering, the associate editors of Frontiers in Bioengineering and Biotechnology, Journal of Mechanical Engineering Science etc.

Robert Riener

Robert Riener is full professor of Sensory-Motor Systems at ETH Zurich and full professor of medicine at the University of Zurich, Switzerland. He obtained a Dipl.-Ing. degree in mechanical engineering in 1993 and a Dr.-Ing. degree in biomedical engineering 1997, both from TU München, Germany. Riener has published more than 500 peer-reviewed articles, 36 book chapters and filed 26 patents. He is the initiator and organizer of the Cybathlon, president of ICORR, AAAS Leshner Fellow and he obtained more than 20 personal distinctions, including an honorary doctor degree from University of Basel.

Gerwin Schalk

Dr. Gerwin Schalk obtained his M.S. in Electrical Engineering and Computer Science from Graz University of Technology in Austria, his M.S. in Information Technology from Rensselaer Polytechnic Institute (RPI) in Troy, New York, and his Ph.D. in Computer and Systems Engineering from RPI. He is interesting in integrating scientific, engineering, and clinical concepts to advance our understanding of the brain and to use this new understanding to develop novel neurotechnologies that improve people's lives. He authored or co-authored >130 peer-reviewed publications, one book and 17 chapters, has >27000 total citations and an H factor of 67, has given more than 270 invited lectures world-wide, is ranked #7 in BCI world-wide and #23 in neuroscience in China. His work has been extensively showcased by the media including features on CNN, NBC, CBS, Science Channel, and articles in New York Times Magazine, Discover Magazine, Forbes, Technology Review, and Wired. He is also listed in Who's Who in the World and Who's Who in America, and received several awards for his work.

Yixuan Sheng

Yixuan Sheng, Assistant Professor at the School of Mechanical Engineering and Automation, Harbin Institute of Technology (Shenzhen), and a distinguished talent under the Shenzhen "Pengcheng Peacock Plan" Category C. Her primary research interests include biomechatronics technology, multimodal physiological sensing and integration, human-machine interaction, and intelligent rehabilitation applications. She has published 24 high-level academic papers in fields such as biomedical engineering and informatics, including 19 SCI papers, and has applied for 13 invention patents, and served as an editorial board member of IEEE ICRA, and as the reviewer for several SCI journals. She has organized and chaired sessions at international conferences ICIRA 2023, ICIRA 2024, and SMC 2024, and has participated in multiple projects, including the National Key Research and Development Program, the China Rehabilitation Medical Association Science and Technology Development Project, and major special projects of Shenzhen Science and Technology.

Ping Shi

Ping Shi received her B.S. degree in Telecommunications Engineering from Wuhan University, and M.S. and Ph.D. degrees in Biomedical Engineering from Shanghai Jiao Tong University, China. Since 2012, she has been at the University of Shanghai for Science and Technology where she is currently a Professor of the Department of Rehabilitation Engineering. She is mainly engaged in the technology development and research of intelligent wearable rehabilitation equipment and Chinese medicine rehabilitation devices. She has successively led and undertaken more than 20 national and provincial-level projects, including the National Natural Science Foundation of China, the National Key R & D Program of China, et al. She has developed portable rehabilitation devices such as wearable cervical/lumbar traction exoskeleton, holographic analgesic transcutaneous electrical stimulator, etc., and explored the coding of cortical network nociceptive response. She has published over 80 academic papers, applied for/authorized more than 20 patents. She has won one second prize for technical invention from the Ministry of Education of China, and one second prize of Science and Technology Progress Award of Shanghai. Her research interests include intelligent rehabilitation assistive equipment and Chinese medicine rehabilitation devices.

Dongquan Shi

Chief physician, professor, doctoral supervisor; Recipient of the National Outstanding Youth Fund; Standing Committee Member of the All-China Youth Federation (Vice Chairman of the Health and Pharmaceutical Sector); The second level of 333 high-level talents in Jiangsu Province; Key Medical Talents in Jiangsu Province; Recipient of the Jiangsu Youth May Fourth Medal; Associate Editor of Annals of Translational Medicine, BMC Surgery; Annals of Joint Editor in Chief; Associate Editor in Chief of Frontiers in Cell and Developmental Biology; Associate Editor in Chief of Frontiers in Genetics; Editorial board member of Fundamental Research; Editorial board member of Journal of Orthopedic Translation and Chairman of the Youth Editorial Board.

Xiaokang Shu

PhD, graduated from Shanghai Jiaotong University. After graduation, he worked in Shanghai Jiao Tong University as a postdoctoral researcher and founded Shanghai Niantong Intelligent Technology Co. LTD. His research topic is "Brain-computer interface technology for stroke rehabilitation", which was supported by the National "973 Program". He has published 18 SCI papers and applied for 38 patents, and won the ICIRA 2013 Best Paper Award. During his postdoctoral period, he was mainly engaged in the clinical application of brain-computer interface (BCI) technology, and successfully applied the BCI technology to the rehabilitation of motor function in stroke patients, which was supported by the National Natural Science Foundation of China (NSFC), and he chaired or participated in two projects from the National Natural Science Foundation of China (NSFC).

Lang Shuai

Lang Shuai, male, PhD, master's degree tutor, secretary of the party branch of the Department of Rehabilitation Medicine, director of the Department, member of the Intelligent Rehabilitation Committee of the Rehabilitation Medicine Society of Jiangxi Province, deputy director of the Intelligent and Regenerative Rehabilitation Branch of the Society of Research Hospitals of Jiangxi Province.

Research direction: spinal cord injury, musculoskeletal rehabilitation, artificial intelligence rehabilitation basic and clinical research

Main academic achievements:

1. In terms of thesis, in the past 5 years, he has presided over and participated in more than 10 national natural and provincial projects, and published more than 20 papers. Among them, "the research and development and clinical application of pulmonary rehabilitation assessment and training system based on virtual reality technology" and "the research on the application of virtual reality-based pulmonary rehabilitation training in healthy people" have been successfully completed and achieved corresponding results.

2. In terms of awards, we have won 1 first prize of Jiangxi Provincial Scientific and Technological Achievements and 2 second prizes of Jiangxi Provincial Scientific and Technological Progress; 2 first prizes of Science and Technology of China Society of Rehabilitation Medicine and 1 third prize of Teaching Achievements; 1 first prize of Virtual Reality Teaching and Application Innovation Competition of 2023 World VR Industry Conference; 2 second prizes of the 2nd National Virtual Simulation Innovation and Application Competition for the team; 2 second prizes of "Challenge Cup", "Internet +" and other competitions more than 10 awards.

3. In terms of patents and monographs, in recent years, he has edited and participated in the editing of 4 monographs by People's Health Publishing House, and has been authorised more than 10 softwriting patents, such as "Virtual Reality Pulmonary Rehabilitation Evaluation and Training Device" and "A Wearable Multi-Parameter Respiratory Rehabilitation Training Device".

Mei Shuai

Beijing University of Aeronautics and Astronautics, professor and doctoral supervisor of the School of Biological and Medical Engineering, Chairman of the Ai Intelligent Rehabilitation Committee of China Disabled Persons Rehabilitation Association, medical robot standardization technical expert of the State Food and Drug Administration. Founded Beijing Dayai Robot, pioneered the exoskeleton robot industry and its innovative clinical application direction, and made contributions and innovations in the research of intelligent rehabilitation technology and mechanism. He presided over 13 research projects such as the National Key research and development Plan and National Nature, and won the "First Prize of Innovation Achievement" of the China Association for the Promotion of Industry-University-Research Cooperation, the Chinese champion of the British Royal Family's "Dragon Gate Creation General" innovation and Entrepreneurship Competition, and the global runner-up. Da Ai robot is the representative of the 2022 Winter Paralympic torch relay and the "March 8 Red Flag Collective" of Beijing.

Torpong Selanon

Born in 1976, Mr. Torpong Selanon received a Master Degree from the Graduate School of

Social Development and Management Strategy, National Institute of Development Administration

(NIDA), Thailand.

He was previously vice president of the Thailand Association of the Blind (2020 - 2021)

before being selected to be Commissioner of the National Broadcasting and Telecommunications

in the area of Consumer Protection and Promotion and Protection of Human Rights in April 2022.

Being visually impaired himself, Mr. Selanon sees the importance of being able to access

services, especially telecommunication services to improve quality of life in the digital

transformation era. Mr. Selanon as the NBTC commissioner is committed to keeping working and

advocating for a connected world.

Bruno Siciliano

Bruno Siciliano is Professor of Control and Robotics, Chair of the Scientific Council of the Interdepartmental Center for Advanced RObotics in Surgery (ICAROS) and Coordinator of the PRISMA Lab in the Department of Electrical Engineering and Information Technology at University of Naples Federico II. He is also Honorary Professor of Óbuda University, where he holds the Kálmán Chair. He is a Board Director and Head of the Robotics Department at CREATE Consortium. He has co-authored/co-edited 19 books, more than 130 journal papers and more than 300 conference papers/book chapters; his book Robotics: Modelling, Planning and Control is one of the most widely adopted textbooks worldwide and has been translated into Chinese, Greek and Italian. He has delivered more than 30 keynotes, more than 150 invited lectures and seminars at institutions worldwide, and he has been the recipient of several awards, including the recent IEEE RAS Pioneer in Robotics and Automation Award (2024). He is a Fellow of IEEE, ASME, IFAC and AAIA. He is co-editor of the Springer Tracts in Advanced Robotics series, the Springer Proceedings in Advanced Robotics series, and has served on the Editorial Boards of several journals as well as chair or co-chair for numerous international conferences. He co-edited the Springer Handbook of Robotics, which received the AAP PROSE Award for Excellence in Physical Sciences & Mathematics and was also the winner in the category Engineering & Technology (2009). His group has been granted twenty-five European projects, including a Synergy Grant and an Advanced Grant from the European Research Council. He has served the IEEE Robotics and Automation Society as President, as Vice-President for Technical Activities and Vice-President for Publications, as a member of the AdCom, and as a Distinguished Lecturer. He has been a Board Director of the European Robotics Association. Professor Siciliano is currently an IFAC Pavel J. Nowacki Distinguished Lecturer, a member of the International Foundation of Robotics Research

Aiguo Song

Aiguo Song received the Ph.D degree in Measurement and Control from Southeast University, Nanjing, China in 1996. From 1996 to 1998, he was an Associate Researcher with the Intelligent Information Processing Laboratory, Southeast University, China. From 1998 to 2000, He was an associate Professor with the School of Instrument Science and Engineering, Southeast University, China. From 2000 to 2003, he was the Director of the Robot Sensor and Control Lab, Southeast University, China. From April, 2003 to April, 2004, he was a visiting scientist with the Lab for Intelligent Mechanical Systems (LIMS), Northwestern University, Evanston, USA. From May, 2004 to Dec, 2019, he was the Dean of School of Instrument Science and Engineering, Southeast University, China. He is currently the Professor and the Division Chairman of Electrical, Instrument and Control, Southeast University, and the Director of Robot Sensor and Control Laboratory. His current interests concentrate on human-robot interaction teleoperation robot, force/tactile sensors, haptic display, and rehabilitation robot. He has published more than 400+ peer reviewed journal papers, and 300+ papers have been indexed by SCIE, and cited time is 12000+. He received the best paper awards 13 times. He is a member of Chinese Instrument and Control Association, IEEE senior member, Chair of IEEE Nanjing Section Robotics and Automation Society Chapter. He serves as Associate Editor for 5 SCIE indexed Journals, and served as Chair or Co-Chair of 80+ International Conference/Symposium. He was recipient of the second prize of the National Scientific and Technological Progress in 2017, and recipient of the National Outstanding Youth Fund of National Natural Science Foundation of China.

Rong Song

Rong Song (Senior Member, IEEE) was born in Hubei, China, in 1975. He received the B.S. degree in electrical engineering from Tsinghua University, Beijing, China, in 1999, the M.S. degree in electronic engineering from Shantou University, Shantou, China, in 2002, and the Ph.D. degree in biomedical engineering from the Hong Kong Polytechnic University, Hong Kong, China, in 2006. He is currently a Professor with the School of Biomedical engineering, Sun Yat-sen University, Guangdong, China. His research interests include musculoskeletal modeling, biomedical signal processing, and rehabilitation robots. Prof. Song was the Special Session Chairs of the IEEE Conference on Advanced Robotics and Mechatronics (IEEE-ARM). He has been serving as a reviewer of several IEEE Transactions.

Ping Song

Senior economist, Big data manager, an observer of the Rehabilitation and Special Equipment for Disabled Persons. He participated in the national key research and development program "Study and Pilots of Assistive Products' Assessment and Fitting System for Persons with Disabilities and Elderly People with Entire or Partial Physical Functions Decline", and participated in the compilation of industry standards for rehabilitation aids service platforms, as well as the group standard "Basic Public Service Platform for Internet-based Assistive Devices - Part I: Platform Construction Guidelines."

Yuandong Shen

The chair of ISO/TC 249 (Traditional Chinese medicine), director of Institute of international standardization on Traditional Chinese Medicine, Shanghai University of Traditional Chinese Medicine, vice chair of sub-committee of TCM standardization of China Association for Standardization, chair of the "Shanghai Standard" Evaluation Committee and the chair of Shanghai TCM Standardization Committee.

He has long been engaged in hospital management and health administration. He ever served as the president of Shuguang Hospital and the former Deputy Director of Shanghai Municipal Health Bureau, also Director of the Shanghai TCM Development Office. During his tenure, he placed great emphasis on standardization work. In 2002, as the pioneer, he firstly led the implementation of ISO quality management system in the national Class A tertiary TCM hospital and published the Guide to the Implementation of International Quality Management Standards for Hospitals in 2003.

He has extensive experiences in the internationalization and standardization of TCM. He has served as Secretary-General, Vice Chair, and Chair of ISO/TC 249. Under his leadership, ISO/TC249 established 6 Working Groups and established 9 liaisons with other international organizations. A total of 112 international standards for TCM has been published. He is also a consultant of the World Health Organization (WHO) on traditional medicine, responsible for managing the Chinese expert group for the development of International Classification of Diseases (WHO ICD11-ICTM).

As the chief editor, he published many publications, such as ISO Standards for Traditional Chinese Medicine: Theory and Practice and History, Present and Prospect of World Traditional Medicine (English Edition). He has won several awards, including the Shanghai Innovation Contribution Award for Standards (Individual) in 2022, the Shanghai Outstanding Contribution Award for Traditional Chinese Medicine in 2020, and the Shanghai Science and Technology Award (Third Prize) in 2013.

Sarun Sumriddetchkajorn

Sarun Sumriddetchkajorn received his B.Eng in Electrical Engineering (Honors) in 1994 from Khon Kaen University, Thailand. He earned his M.S. (1998) and Ph.D. (2000) in Optical Science and Engineering from University of Central Florida, USA. From 1994-1996, he was an Assistant Researcher at National Electronics and Computer Technology Center (NECTEC) under National Science and Technology Development Agency (NSTDA), Thailand. Since 2001, he had rejoined NECTEC where he focused on solving technical issues related to agriculture, public health, security, and industry with optics and photonics. He also played leadership roles as Lab Director, Research Unit Director, Deputy Executive Director of NECTEC, Executive Director of NECTEC, and Acting Executive Vice President of NSTDA.

He was a Member of Advisory Committee for Thailand's National Security Council on Science, Technology, and Digital and Chair of ASEAN Committee on Science and Technology's Subcommittee on Information and Technology. He received the 2003 Young Technologist Award and the 2004 Young Scientist Award from the Foundation for the Promotion of Science and Technology under the Patronage of H. M. the King of Thailand. In addition, he was awarded the 2005 ICO/ICTP Award from the International Commission for Optics (ICO) and the ICTP. In 2002, he initiated the formation of the SPIE, Optica, and IPS Thailand Chapters. He is currently a Senior Member of IEEE. He is also a Fellow of SPIE and Optica, and the President of CREATE ASIA.

Fuchun Sun

Sun Fuchun, Full Professor of the Department of Computer Science and Technology， Tsinghua University, IEEE/CAAI/CAA Fellow, Recipient of the National Outstanding Youth Fund; Serving as a member of the Academic Committee of Tsinghua University, Vice Chairman of the Professor Appointment Committee of the Department of Computer Science and Technology, and Director of the Intelligent Robotics Center of the Tsinghua University Artificial Intelligence Research Institute. He also served as the vice chairman of the Chinese Association of Artificial Intelligence, the supervisor of the Chinese Association of Automation, and the executive director of the Chinese Association of Cognitive Sciences. Serving as the editor in chief of international publications Cognitive Computation and Systems, AI and Autonomous Systems, executive editor of CAAI Artificial Intelligence, deputy editor in chief of IEEE Trans. on Fuzzy Systems, and editorial board member of Robots and Autonomous Systems and International Journal of Social Robots.

Junfeng Sun

Dr. Junfeng Sun is a full professor of biomedical engineering at School of Biomedical Engineering and Med-X Research Institute, Shanghai Jiao Tong University. He is IEEE Senior Member, Associate Editor of IEEE Transactions on Neural Systems & Rehabilitation Engineering. He has been supported by grants from National Natural Science Foundation of China (PI), National Key R&D Program of China (Co-PI), National Basic Research Program of China (Co-PI), Natural Science Foundation of Shanghai, China (PI), and Science and Technology Commission of Shanghai Municipality, China (PI). His research interests include transcranial ultrasound stimulation (TUS) techniques, neuroimaging techniques and analysis methods, and applications of these techniques to cognitive function and therapeutic intervention for brain diseases including depression, schizophrenia, and stroke. He has published more than 80 refereed papers in journals including Biological Psychiatry, Brain Stimulation, iScience, NeuroImage, IEEE TBME, Human Brain Mapping, and IEEE TNSRE. He is the founder of Nantong Brain Plus Medical Technique Limited, which focuses on TUS techniques and systems.

Lining Sun

Lining Sun, Ph.D., Professor, Ph.D. Supervisor, Winner of the Ho Leung Ho Lee Foundation, Winner of the National Science Fund for Distinguished Young Scholars, Changjiang Scholars Distinguished Professor, National High-level Expert, Foreign Academician (Foreign Full Member, Academician) of the Russian Academy of Engineering, Dean of the School of Mechanical and Electrical Engineering of Soochow University, Director of the Robotics and Microsystem Research Center, Deputy Director of the State Key Laboratory of Robotics and Systems, and Director of the Jiangsu Provincial Key Laboratory of Advanced Robotics Technology. He serves as a technical expert on robotics and micro-nano manufacturing technology in the field of advanced manufacturing under the "the 10th Five-Year Plan", "the 11th Five-Year Plan", "the 12th Five-Year Plan" and National High Technology Research and Development Program ("863" Program) of China. He is mainly engaged in the research of industrial robots and mechatronics equipment, micro and nano operation robots and equipment, medical and special robots. He has presided over more than 20 projects such as the National Natural Science Foundation of China, the 863 Program, the 973 Program, and National Science and Technology Major Project, and won two Second Class Prizes of the State Technological Innovation Award and the State Science and Technology Advancement Award, and five first prizes of the Provincial and Ministerial Technological Invention and Scientific and Technological Progress Awards, published more than 500 papers, authorized more than 50 national invention patents, and many achievements realized industrialization.

Qiangsan Sun

Chief physician, professor, doctoral supervisor, academic leader of the Rehabilitation Medicine Center, The Second Hospital of Shandong University. Chinese medical association physical medicine and rehabilitation branch of members, Chinese rehabilitation medical association, deputy director of consciousness disorder rehabilitation committee,rehabilitation medical association of Shandong province, Shandong province hospital association secretary general, Shandong health management association, director of the committee member, the Chinese journal of rehabilitation medicine, the Chinese journal of physical medicine and rehabilitation editors.

Rui Sun

Dr Rui Sun graduated from the Department of Biomedical Engineering at the Chinese University of Hong Kong with a PhD degree. After graduation, she worked as a postdoctoral research fellow at the Neuroscience Education Laboratory at the University of Hong Kong. She is currently employed as an Assistant Professor in the Department of Rehabilitation Sciences at the Hong Kong Polytechnic University. Dr Sun has been extensively engaged in research in the field of neurorehabilitation engineering. She has rich research experience in areas such as brain-computer interfaces, rehabilitation robotics/exoskeletons, bio-electrical signal processing, and stroke motor rehabilitation. She has published over 30 papers in SCI journals and top international conferences, holds 3 granted invention patents. Dr Sun served as the principal investigator or co-investigator on research projects with a total funding amount exceeding HK$4 million.

Tao Sun

Tao Sun is a Professor in Tianjin University. He is also the Party Secretary in School of Mechanical Engineering, Principal Scientist of National Key Research Program and Development Plan, and Changjiang Young Scholar. His research interest focuses on design, control and application of medical robots with enhanced performances. He has designed a wearable orthopedic surgery robot which has gone through more than 100 clinical tests in Tianjin University, PLA General Hospital, etc. A registration license has been authorized to the robotic system. He also carried out quantitative analysis and assessment of loads in lower limbs. Orthopedic rehabilitation robots were developed for post-surgery treatments of long bone and arthrosis. Tao Sun is the PI of 12 national/provincial projects including National Key Research Program and Development Plan. The total funding is over 60 million RMB. He has published a Springer book. As the first or corresponding author, he has published more than 60 SCI-indexed papers with more than 3,000 citations by other scholars. He has been the Highly cited Chinese researcher from 2020 to 2023. He got 9 Best Paper Award in international conference, journal or Chinese Mechanical Engineering Society. One of his papers was chosen as 100 Best Paper by China Association for Science and Technology. He has been authorized 4 US patent and 60 Chinese patents. He is the Associate Editor of 4 SCI journals such as IEEE Transactions on Medical Robot and Bionics. As the primary contributor, he has won 1st class Award for Tianjin Technological invention in 2020, Top 1 of the 1st class Award for Tianjin Natural Science in 2023, 1st class Award for Industry-University-Research Cooperation in 2021, China Good Design in 2020, Excellent China Patent Award in 2023, and 10 Achievements of China Smart Manufacturing.

Zhongbo Sun

Zhongbo Sun received the Ph.D. degree in control theory and control engineering from Jilin University, Changchun, China, in 2016. In 2020, he was a Postdoctoral Fellow with the Key Laboratory of Bionics Engineering, Ministry of Education, Jilin University. In 2019, he was also an Academic Visitor with Peking University, and in 2020, he was also an Academic Visitor with Michigan State University. He is currently a Full Professor with the Department of Control Engineering, Changchun University of Technology, Changchun, China. His research interests include rehabilitation robots, bipedal robots, neural networks, and nonlinear programming.

Jackrit Suthakorn

PhD is currently an Associate Professor at the Department of Biomedical Engineering at Mahidol University, Thailand. He received his PhD in Robotics from The Johns Hopkins University, USA in 2003, master's degree from Michigan Technological University, USA in 1998, and bachelor's degree in mechanical engineering from Mahidol University, Thailand in 1995. He was the founder of the Center for Biomedical and Robotics Technology (www.BART LAB.org), the first research center to focus on Medical Robotics Research in Thailand since 2004. In 2006, he was a co-founder to establish the Thailand's first Department of Biomedical Engineering at the Mahidol University. He was the first department chair since then until 2015. He was appointed to be the Dean of Engineering at the Mahidol University for two consecutive terms from 2015 to 2023. Under his leadership: Mahidol Engineering was the Thailand's first Engineering Institute to be accredited by "ABET, USA" for 6 programs at the same time; Mahidol Engineering was awarded the Thailand Quality Class (TQC) in 2022 as the first Science and Technology Academic Institute in Thailand; and Mahidol Engineering was ranked No. 3 in Thailand by the "THE" World Ranking 2022 by subject in Engineering and Technology. He was voted to be the President of The Council of Engineering Deans of Thailand for two terms in 2018 and 2022. His research interest is aiming to Medical Robotics: (1) Surgical Robotics; (2) Rehabilitation Robotics; and (3) Hospital Service and Tele-Medicine Robotics, including, Surgical Training Systems and Int'l Standards for active medical devices. His research works have been published over 90 publications in international journals, book chapters and peer-reviewed conference proceedings in the scopus database. His accumulated research funding as the PI is more than 10 Million USD over the past 20 years. He was one of Co-Founders of Thai Robotics Society (TRS) in 2004, and he was selected to be the President of Thai Robotics Society from 2007 to 2010. He also served as a Trustee of the International RoboCup Federation for two terms from 2019-2023. He is the General Chair of the "World RoboCup 2022," held in Bangkok, Thailand. Currently, he is the President of Thailand RoboCup Robotics Association, and the Chair of IEEE Robotics and Automation Society, Thailand Chapter.

Hongyan Tang

PhD, is currently a lecturer and master's supervisor at the University of Shanghai for Science and Technology, and was a visiting scholar at York University in Canada. He is currently focusing on the research of rehabilitation robots, exoskeleton robots and parallel robots. He has innovatively proposed a virtual equivalent parallel mechanism modeling method, which provides a new way to analyze the performance of the robot-environment-target fusion system. He has successfully developed several robot systems, including ankle rehabilitation robots, knee exoskeleton robots, etc., and applied parallel mechanism technology to rehabilitation medicine, aerospace and other fields. He has presided over and participated in a number of national and provincial and ministerial projects, and won the special support of the Shanghai Science and Technology Commission's Morning Star Project in 2023. He serves as a member of the Rehabilitation Assistive Devices Professional Committee of the Shanghai Disabled Rehabilitation Association and the publication chair of the first World Rehabilitation Robot Convention. He has published many papers in top journals such as Mechanism and Machine Theory and authorized four invention patents. He won the first award in the emerging drive project in the "Super Warrior-2019" single-soldier exoskeleton system challenge.

Qirong Tang

Qirong Tang received his B.Sc. and M.Sc. from Harbin Institute of Technology (Institute of Robotics), and the Ph.D. from University of Stuttgart, Germany, major in Mechanical Engineering, Mechatronics at Robotics direction. He is currently a full Professor (with distinguish) at Tongji University and the Founding Director of the Laboratory of Robotics and Multibody Systems, as well as the Leader of the Intelligent Unmanned Equipment Team. Meanwhile, he had served as the vice dean of the School of Mechanical Engineering of Tongji University and now he serves as the Vice Dean of Chinesisch-Deutsches Hochschulkolleg (CDHK) and the Dean of Chinesisch-Deutschen Doktorandenkolleg (CDDK), as well as the member of the Affairs Committee of Tongji University. Prof. TANG is the holder of National High-level Talents Program, National Overseas High-Level Talents, and Shanghai Pujiang Scholar. His research interests mainly include swarm intelligence and swarm robots, prosthetic hands and so on with their applications in the extremely complex environments. Additionally, Prof. TANG's team has developed 24 types of specialized robots as well as their platforms of both hardware and software in recent years. Prof. TANG has won 8 prizes at the provincial level or above, including the Shanghai Outstanding Contribution Award for Young Scientists, the Second Prize of the Shanghai Scientific and Technological Award, and the First Prize in Scientific and Technological Award of the Chinese Society of Naval Architects and Marine Engineers.

Chunjing Tao

Professor, Ph.D. Supervisor, Beihang University 'Medical Engineering Hundred Talents'candidate, Deputy Dean of the School of Engineering Medicine Beihang University, and Head of the Medical Technology Transfer Office of Beijing Advanced Innovation Center for Biomedical Engineering.She is also the Deputy Chairman of the Health Engineering Branch of the Chinese Society of Biomedical Engineering, Deputy Chairman of the Rehabilitation Engineering Committee of China Association of Assistive Devices Products, and Deputy Chairman of the Rehabilitation Engineering and Assistive Technology Professional Committee of the China Association of Rehabilitation of Disabled Persons.

Prof. Tao is also an evaluation expert of national science and technology leading talents、talents of Ministry of Industry and Information Technology、Beijing Science-technology Nova, She serves as an expert reviewer for National Key R & D Program of China, the National Natural Science Foundation of China, and innovative medical device projects.
Prof. Tao's research focuses on intelligent rehabilitation technology and equipment development, as well as key technologies and industrial applications of rehabilitation aids. She has conducted or participated in over 40 National, provincial and ministerial scientific research projects, published more than 80 papers, and obtained more than 50 authorized/-public invention patents.

Dr. Tao has received several prestigious awards and honors, including the First Prize of the China Machinery Industry Science and Technology Award for Technological Invention (2023), the First Prize of the Hubei Science and Technology Invention Award (2019), the Grand Prize of National Commercial Science and Technology Progress Award (2016), the Excellence Award of the China Patent Award (2018).

Raymond Kai-yu Tong

Professor Raymond Kai-yu Tong obtained his B.Eng in Computer Engineering with the highest honor from the University of Hong Kong (HKU) in 1995 and received his PhD in Bioengineering from the University of Strathclyde, Glasgow, UK, in 1998. Now, he is serving as Professor and Founding Chairman of the Department of Biomedical Engineering (BME) and Director of BME Master programme at The Chinese University of Hong Kong (CUHK).

Prof. Tong is among the world's top 2% most-cited scientists in their main disciplines for career-long citation impact since 2020. He is fellow of The American Institute for Medical and Biological Engineering (AIMBE) and The Hong Kong Institute of Engineers (HKIE). His research interests include rehabilitation robot, motion-based rehabilitation software and functional electrical stimulation system for persons after stroke. Over these years, he has made great strides in developing a wide range of rehabilitation devices. His innovative work on rehabilitation robot system "Hand of Hope" was the first Hong Kong invention to have received the grand prize in the 40-year history of the International Exhibition of Inventions of Geneva (2012). Recently, his project "A Powerful and Wearable Artificial Muscle" and "Wearable Exoskeleton Robot for Walking" won a Gold medal with the congratulations of the jury at the International Exhibition of Inventions of Geneva in 2023 and 2016 respectively, making Hong Kong internationally visible in this emerging area in healthcare technology.

Prof. Tong has been honoured with the "Global Ageing Influencers 2021" award at the 9th Asia Pacific Eldercare Innovation Awards Ceremony held by the Ageing Asia in Singapore, in recognition of his outstanding achievements in rehabilitation innovations, programmes and services that advance the standard of living for older adults on a global scale. Prof. Tong is the only winner of the "Global Ageing Influencers 2021" from Hong Kong. At the same occasion, the "HOPE 4 Care" programme led by Prof. Tong's research team and the Faculty of Medicine, CUHK, took home the "Best Rehabilitation Programme" award.

Chunxiao Wan

Professor, chief physician, doctoral supervisor.
Director of the Department of Rehabilitation Medicine at Tianjin Medical University, Director of the Rehabilitation Department at Tianjin Medical University General Hospital, Head of the National First Class Undergraduate Construction Project in Rehabilitation Therapy, Director of the National Rehabilitation Resident Physician Training Demonstration Project Tianjin base. ISPRM-AIM member, council member of the Chinese Rehabilitation Medicine Association, vice chairman of the Critical Care Rehabilitation Branch, deputy leader of the Education Group of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association, and standing committee member of the Chinese Rehabilitation Physicians Association.

Deqiang Wang

Discipline Leader, Chief Physician, Professor, Master's Supervisor
academic leader of the Rehabilitation Medicine Department of Binzhou Medical University Hospital,
director of the Rehabilitation Medicine Department of Yantai Affiliated Hospital of Binzhou Medical University.

Duojin Wang

Duojin Wang, Associate Professor at the Institute of Rehabilitation Engineering and Technology, University of Shanghai for Science and Technology, is recognized as a "Pujiang Talent" of Shanghai. He holds a Ph.D. from the Technical University of Berlin, Germany, and is a recipient of the DAAD Stibet Scholarship. Professor Wang has been extensively involved in research on wearable exoskeleton robots and rehabilitation assessment and decision-making based on artificial intelligence and brain imaging technologies. He serves as the Deputy Secretary-General of the Rehabilitation Engineering Committee of the Shanghai Society of Biomedical Engineering, as well as the Deputy Secretary-General of the SIAER.

Professor Wang has led and participated in the drafting and establishment of three national standards. He has been awarded two first-place awards for Scientific and Technological Achievements and one first-place award for Educational Achievements from the China Association of Rehabilitation Medicine. Additionally, he received a second-place Shanghai Science and Technology Award. He has led or been a key participant in over ten research projects funded by various national departments including the Ministry of Science and Technology, the Ministry of Civil Affairs, the Ministry of Education, the Shanghai Science and Technology Commission. Professor Wang has published over 30 SCI-indexed papers and authored a German monograph in his field.

He Wang

He Wang is a professor and Ph.D. supervisor at Fudan University, serving as the director of Zhangjiang International Brain Imaging Centre of Fudan University. He is also a professor at Zhongshan Hospital, and did his postdoctoral research at Emory University. In addition, he serves as the deputy director of the Brain Function Detection and Regulation Rehabilitation Professional Committee of the Shanghai Association of Rehabilitation Medicine, the standing committee member of the Brain Function Detection and Regulation Rehabilitation Professional Committee of the Chinese Association of Rehabilitation Medicine, the supervisor of the Municipal Nonlinear Science Society, and the standing committee member of the Radiology Branch of the Shanghai Society of Biomedical Engineering. In the past five years, he has led over 10 scientific research projects including the National Natural Science Foundation, Shanghai Natural Science Foundation, Shanghai Explorer Program, and Shanghai Science and Technology Commission major special projects. In the past five years, he has published more than 50 papers in IEEE Trans Med Imaging, Science Advances, Hypertension, Neuroimage, IEEE J Biomed Health Inform and other international academic journals. He applied for 15 national invention patents, 11 of them have been authorized, and 3 of them have been transformed. He won the second prize of Shanghai Science and Technology Progress (ranked first), the second prize of Jiangxi Science and Technology Progress (ranked second) and the second prize of Shanghai Integrated Traditional Chinese and Western Medicine Science and Technology Award (ranked second), etc.

Haochong Wang

Haochong Wang, founder and CEO of Xi 'an Zhentai Intelligent Technology Co., LTD., Doctor of Biomedical Engineering, Master of Mechanical Engineering, Xi 'an Jiaotong University, Forbes China Under 30 in 2019, Forbes Asia Under 30 in 2020, Entrepreneurship Pioneer of China Association for Science and Technology, Member of Brain-Computer Interface and brain-like Intelligence Special Committee of China Standardization Association, He is a member of the brain-computer Interface and rehabilitation Committee of the Chinese Rehabilitation Medical Association, and the company he founded, Zhentai Intelligent, is a pioneer in the global brain-computer rehabilitation industry. Its products have been clinically applied in many top three hospitals, won the champion of the World Medical Robot Competition in China, participated in a number of national provincial and municipal projects, published many papers, and applied for/authorized more than 40 patents.

Hongbo Wang

Hong bo Wang is a professor and doctoral supervisor at Fudan University. He is national specially appointed expert, an expert of the Science and Technology Achievement Transformation Expert Committee of the China Association for Promoting Industry University Research Cooperation, Chairman of the Hebei Robot Industry Innovation Alliance, and Executive Member of the Rehabilitation Engineering and Industrialization Promotion Committee of the China Rehabilitation Medicine Association

He studied abroad at the Institute of Robotics at ETH Zurich in Switzerland, obtained a doctoral degree from Nagasaki University in Japan, and served as a counselor at DAIHEN Corporation in Japan. He has been engaged in robot research for over 30 years. Published over 180 papers in journals and international conferences. As the first inventor, he has been granted more than 80 national invention patents. He has led and undertaken 14 national level projects, and more than 10 provincial and ministerial level projects. He has won one first prize in Science and Technology in Hebei Province, two first prizes and one second prize in Science and Technology Progress from the Ministry of Education, three other provincial and ministerial level science and technology awards.

His research interests include medical robots, parallel robots and mobile robots, among which two rehabilitation robots and one transfer nursing robot have obtained Class II medical device product certificates.

Jinwu Wang

Jinwu Wang, Doctor of Medicine, Chief Physician of the Orthopedics Department of the Ninth Affiliated People's Hospital of Shanghai Jiao Tong University School of Medicine, Professor, Doctoral Supervisor, and Postdoctoral Supervisor of Shanghai Jiao Tong University School of Medicine. Chief Scientist of two national key research and development plans of the Ministry of Science and Technology during the 13th and 14th Five Year Plans. We have been committed to the fields of orthopedic surgery, digital medicine, 3D printing of bone and joint biology, and orthopedic rehabilitation for a long time. Our biological 3D printing project has been featured in a special report by Nature. We have undertaken 10 national level projects, including the 13th and 14th Five Year Plans of the Ministry of Science and Technology, as well as sub projects 863 and 973 of the Ministry of Science and Technology. Obtained the first 3D printing medical device registration certificate in China, led the development of 14 medical device standards, including the first biological 3D printing standard and 3D printing rehabilitation accessory standard in China. Participated in the compilation of 19 monographs, with 12 monographs as chief or deputy chief editors, 1 chief translator and 1 deputy chief translator. Published over 100 high-quality papers as first author or corresponding author, including sub journals of Nature and Science.

Awarded as the Person of the Year of the Chinese People in Science (2016), and won the first prize of Shanghai Technology Invention in 2022 as the first complete person. Also awarded the first prize of Science and Technology by the Ministry of Education, the first prize of Shanghai Medical Science and Technology, the first prize of Shanghai Rehabilitation Medical Science and Technology, the first prize of Chinese Medical Science and Technology Progress, the Jiangsu Medical Science and Technology Award, and the first prize of Jilin Province Science and Technology.

Jingxin Wang

Doctor of Medicine, Chief Physician, Master's Supervisor
Director of Rehabilitation Medicine Department, Zhengzhou Central Hospital Affiliated to Zhengzhou University
Leader of Key Discipline of Rehabilitation Medicine in Henan Province
Young and middle-aged academic leaders in Henan Province
Representative of the 10th National Congress of the China Association for Science and Technology
Expert reviewer for the China Association for Science and Technology Talent Award
Member of the Council of the Chinese Rehabilitation Medicine Association
Chairman of the Youth Work Committee of the Chinese Rehabilitation Medicine Association
Chairman of the Physical Medicine and Rehabilitation Professional Committee of Zhengzhou Medical Association, Henan Province
Vice Chairman of the Neural Regeneration and Repair Professional Committee of the Chinese Research Hospital Association
Vice Chairman of the Youth Committee of the Rehabilitation Physicians Branch of Henan Medical Association
Won the honorary titles of "Most Beautiful Rehabilitation Scientist", "Excellent Rehabilitation Physician", "exemplary individual in Medical Administration", "exemplary individual in Health Science and Education", etc., was rated as "Most Beautiful Worker" by the Propaganda Department of Zhengzhou Municipal Party Committee of Henan Province, and "Zheng Hao Youth" by the Organization Department of Zhengzhou Municipal Party Committee of Henan Province;
Hosted and participated in over 20 scientific research projects, including National Natural Science Foundation projects, international cooperative research projects, National Health Commission Medical and Health Science and Technology Development Research Center 2030 Major Project, National Key R&D Program, Henan Province Key R&D and Promotion Special Project, Henan Province Traditional Chinese Medicine Science Research Special Project, Henan Province Medical Education Research Project, etc; Applied for over 30 patents; Participated in the compilation of rehabilitation textbooks for the 13th Five Year Plan, national expert consensus and other works, and published more than 50 academic papers in core journals at home and abroad. He has successively won awards such as the Science and Technology Award of the Chinese Rehabilitation Medicine Association, the Natural Science Award of Henan Province, the Medical Science and Technology Award of Henan Province, and the Excellent Achievement Award of Medical Education in Henan Province.

Jue Wang

Ph.D., Professor, Doctoral supervisor. Director of Institute of Health and Rehabilitation Science, School of Life Sciences & Technology, (2006-2022); Director of Rehabilitation Science and Technology Research Center; Xi 'an Jiaotong University; Deputy Director, National Engineering Technology Research Center for Health Care & Medical Devices, XJTU Branch; Director, Key Laboratory of Neurofunctional Information and Rehabilitation Engineering, Ministry of Civil Affairs; Adjunct Professor, School of Health and Rehabilitation Sciences, University of Pittsburgh (2002-2020); She is also a distinguished Professor of the First Affiliated Hospital of Xi'an Jiaotong University, Honorary President and Chief Scientist of Daxingshansi Branch of the First Affiliated Hospital, XJTU. She has been engaged in scientific research and teaching for 47 years, and has build a discipline direction of rehabilitation science and technology and a teaching system of 20 professional courses featuring multi-disciplinary intersections. She is the director of the editorial committee of the "Rehabilitation Science and Technology" series of teaching materials in the "14th Five-Year Plan" of the Biomedical Engineering Professional Teaching Committee of the Ministry of Education. Her main research interests are neurofunctional informatics and rehabilitation engineering. She has presided over more than 40 national key topics, trained more than 160 postgraduate/graduate Students, and developed more than 20 kinds of rehabilitation diagnosis and treatment equipment; More than 40 international/domestic patents; Published more than 120 SCI papers, EI papers more than 70; Editor-in-chief/participated in editing 15 textbooks/-monographs at home and abroad. She has won more than 10 scientific research awards from national/provincial/ministerial level companies and schools.

Kunyang Wang

Ph.D. from the University of Manchester, UK, is a national high-level talent, a national outstanding postdoctoral fellow in innovation and entrepreneurship, a Tang Aoqing Scholar of Jilin University, a member of the Postdoctoral International Exchange Programme, and a member of the Fifth Batch of Young Scientific and Technological Talent Support Project of Jilin Province. He is currently an Associate Professor of Jilin University, and also serves as a Standing Member of the ISBE Youth Committee, and Associate Editors of Journal of Bionic Engineering and ICRA 2024. He has been engaged in bionic robotics and rehabilitation devices. He is the first to create a multidisciplinary integration of the human musculoskeletal system in vivo precision analysis technology, pioneered the field of bionic robotics based on human musculoskeletal intelligence, put forward original bionic Layagrity robotics theory and technology, and developed the world's first humanoid walking robot that reproduces the human 3D natural walking gait, and the energy consumption of the movement has been reduced by nearly two orders of magnitude. He has also developed bionic prosthetic ankle joints and bionic prosthetic footplates, which have been transformed and applied in enterprises. In the past 5 years, he has presided over 11 national, provincial and ministerial level projects, published more than 20 SCI papers, authorised more than 20 EU, UK and Chinese invention patents, and won 2 first prizes for provincial and ministerial level technological inventions and 1 first prize for international innovation in rehabilitation engineering.

Lin Wang

Prof. Lin Wang is a Professor at Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences (SIAT, CAS), and the Director of the Shenzhen Intelligent Lower Limb Rehabilitation Engineering Research Center. She had her PhD degree at the University of Bristol, UK, followed by 5 years working at Siemens Healthcare UK, and Harvard Medical School, US. She joined SIAT, CAS in 2017. Her research interests lie on human-machine intelligent interactive motion rehabilitation for motor dysfunction caused by degenerative diseases of the neuromuscular system. She is listed as the Distinguished Researcher of the Chinese Academy of Sciences, Shenzhen's Overseas High Level Talent, and serves as the Royal Society of Mechanical Engineering member, IEEE senior member, the Chinese Automation Society committee member, the Chinese Artificial Intelligence Society committee member, Deputy Secretary-General of the Shenzhen Artificial Intelligence Society. She works as a PI in multiple national grants, e.g. National Natural Science Foundation of China, National Key R&D Plan, and as well as she is capable in more than 10 grants including several International Cooperation Projects, with a total funding of more than 32 million RMB. In the past 3 years, she published more than 20 academic papers, 3 book chapters, applied for/authorized 20 invention patents, including 3 PCT invention patents. She is also additionally posted as a reviewer for IEEE TII, IEEE THM, IEEE TASE journals, and has been selected as an expert reviewer of National Natural Science Foundation of China, and National Key R&D Plan. She is appointed as an evaluation expert of urgently needed drugs and medical devices imported from Hong Kong and Macao for clinical use in the Guangdong-Hong Kong-Macao Greater Bay Area.

Lizhen Wang

Lizhen Wang is a Professor in School of Biological Science and Medical Engineering of Beihang University. She is actively involved in the development of various novel medical devices, such as biomimetic minimally biodegradable nucleus pulposus scaffold, nanofibrous tissue engineering scaffold with adjustable mechanical and electrical properties. Lizhen has generated over 100 peer-reviewed journal papers including 80 journal articles, 20 conference proceedings and book chapters. She is the Chair of World Association for Chinese Biomedical Engineers (WACBE) Young Committee, Associate Editor of Computer Methods in Biomechanics and Biomedical Engineering (CMBBE).

Qiang Wang

Qiang Wang is an Associate Professor /Senior Engineer and the Investigator of scientific research projects at the National Research Center for Rehabilitation Technical Aids. Wang serves as a co-advisor for master's students. His research focuses on the development of rehabilitation artificial intelligence and control systems. Wang has participated in or led over ten scientific research projects at the provincial and ministerial levels. He has published more than ten papers as the first author or corresponding author and holds over thirty authorized invention patents. In 2019, the intelligent walker project under his leadership won the second prize in the industry category at the China Rehabilitation Assistive Device Industry Innovation Conference and the first Rehabilitation Assistive Device Innovation Competition. In 2020, the project was selected as an outstanding entry in the Hebei Regional Competition of the 9th China Innovation and Entrepreneurship Competition. Since 2021, Wang has been a key contributor to the successful commercialization of two technological achievements: the intelligent walker patent and the multi-modal wheelchair patent.

Pin Wang

Pin Wang, male, Doctor of Medicine, Doctoral supervisor and also professor of Anhui University of Chinese Medicine.

Dr. Wang currently serves as the Secretary-General of the Acupuncture Equipment and Facilities Work Committee of the China Acupuncture Society, executive member of the Acupuncture Instruments Professional Committee of the China Acupuncture Society, and member of the Acupuncture Standardization Work Committee of the China Acupuncture Society.

He is associate editor of "Experimental Acupuncture" for the Thirteenth Five-Year Plan Textbooks for Higher Education in Medicine and Pharmacy published by Science Press; Associate editor of "Experimental Acupuncture" for the Fourteenth Five-Year Plan Textbooks for Higher Education in Medicine and Pharmacy published by Science Press; Associate editor of "Biomechanics" for the Twelfth Five-Year Plan Textbooks for Higher Education in Medicine and Pharmacy published by People's Medical Publishing House.

Main research areas:
1. Research on Acupuncture Instruments, Equipment, Facilities, and Standardization;
2. Research on the Mechanisms of Acupuncture;
3. Research on Traditional Chinese Medicine Diagnostic Equipment.

Main research experience:
Dr. Wang has led several basic and applied research projects, including the 2018 National Key R&D Program on Traditional Chinese Medicine Modernization, a subproject of the National Twelfth Five-Year Plan Science and Technology Key Project, major natural science research projects in Anhui Province, and Anhui Provincial Natural Science Foundation projects. In addition, he published over 30 related research papers, obtained more than 10 patent authorizations, and received 3 software copyright certificates.

Qing Mei Wang

Dr. Qing Mei Wang obtained PhD and MD at the University of Medicine and Dentistry of New Jersey. She is director of Stroke Biological Recovery Laboratory, and staff physiatrist at Spaulding Rehabilitation Hospital, the teaching affiliate of Harvard Medical School. Her clinical practice and research focus on stroke rehabilitation. Dr. Wang's research has been funded by American National Institute of Health, as well as international collaboration grant. Her research involves cellular, animal and clinical disciplines, including biomarker, genetic study and pharmacological intervention to promote stroke recovery. Her research found that gene variation of ROCK1, an inflammatory mediator confers greater risk of ischemic stroke, identified an upstream regulator of ROCK that is important in regulating cognitive deficit after stroke. In addition, her study showed promising results of two combination therapies to promote stroke recovery. Her laboratory has trained more than 30 visiting scholars in the rehabilitation medicine.

Qi Wang

Ophthalmology Center, Shandong Provincial Hospital, Doctor of Medicine, Chief Physician, Recipient of the "Outstanding Young Talent" honor in Ophthalmology in Shandong. Deputy Leader of the Strabismus and Pediatric Ophthalmology Group of the Ophthalmology Branch of the Shandong Medical Association, Deputy Leader of the Congenital and Hereditary Eye Diseases Group of the Vision Rehabilitation Branch of the Shandong Rehabilitation Medical Association, Deputy Chairman of the Ophthalmology Branch of the Jinan Medical Doctor Association.

Ranran Wang

Ranran Wang is a researcher at the High Performance Ceramics and Superfine Microstructure National Key Laboratory, Shanghai Institute of Ceramics, Chinese Academy of Sciences. She is a doctoral supervisor and recipient of the National Science Fund for Excellent Young Scholars. Her research focuses on flexible sensitive materials and sensors. She has published over 70 papers in prestigious journals like J. Am. Chem. Soc. and Adv. Mater., with more than 5700 citations and an H-index of 37. She holds 23 invention patents and has led 15 national and provincial projects. Wang is actively involved in several academic societies, including the Youth Working Committee of the Chinese Materials Research Society and the Functional Materials Division of the Instrumentation Society. She also serves on the editorial boards of several journals, including Journal of Inorganic Materials and Nano-Micro Letters.

Weiqun Wang

Wei qun Wang is a professor with the Institute of Automation, Chinese Academy of Sciences, and a key member of the Center for Excellence in Brain Science and Intelligent Technology, Chinese Academy of Sciences. He is an IEEE Senior Member, the Vice Chairman of the Intelligent Health and Bioinformatics Special Committee of the Chinese Association of Automation, and a member of the Rehabilitation Engineering Branch of Chinese Society of Biomedical Engineering and other special committees.

He hosted and undertaken over 10 national level projects, including Original Exploration Program from the National Natural Science Foundation, Key Research and Development Program from the Ministry of Science and Technology. He has proposed technical methods for the design and modeling of rehabilitation robots, intention recognition based on EEG and sEMG signals, and intelligent rehabilitation strategies that enhancing patient active participation. He have developed prototype platforms such as the full cycle lower limb rehabilitation robot, the foot drop rehabilitation exoskeleton, and the upper limb rehabilitation robot, etc. He has published over 80 academic papers, authorized 31 national invention patents, and authorized 2 US PCT patents. He has been selected for the CAA Young Scientist Award, won 3 provincial and ministerial level awards, and won awards such as the gold medal at the Geneva International Invention Exhibition and the special prize at the National Robot Patent Innovation and Entrepreneurship Competition as the first author.

Wei Wang

Research on information accessibility since 2009, a member of the W3C AC committee, assistant to the director of the Public Welfare Work Committee of the China Computer Federation(CCF). Participated in the writing of an international standard, organized the translation of three international standard into Chinese, and participated in the formulation of four national standards.

Participated in three projects under the 11th and 12th Five-Year Plan for National Science and Technology Support and four projects under the 13th Five-Year Plan for National Key Research and Development Program. Published over 20 related papers in international conferences on information accessibility such as W4A, CSUN, and ICCHP.

The related research results won the first prize of the 2019 Zhejiang Science and Technology Progress Award.

Yagang Wang

Yagang Wang is currently a professor in University of Shanghai for Science and Technology at Shanghai, China. His research interests include medical robot, rehabilitation robot, system identification and control etc. His main academic part-time positions include: member of the Process Control Committee of the Chinese Society of Automation, member of the Rehabilitation Engineering Committee of the Shanghai Society of Biomedical Engineering, and council member of the Shanghai Society of Automation. He received his B.E. degree in electrical engineering from China University of Mining and Technology, China, in 1988, the M.E. degree in control theory and application from Taiyuan University of Technology, China, in 1991, and the Ph.D. degree in control theory and control engineering from Shanghai Jiao Tong University, China, in 2000. He worked as a Research Fellow in Nanyang Technological University, Singapore, from 2000 to 2002. He worked as Senior Engineer in Honeywell (China) Co., Ltd. from 2003 to 2007. He hosted and completed national key R&D program projects, National Natural Science Foundation projects, Shanghai Science and Technology Commission key research projects, Shanghai Natural Science Foundation projects, Honeywell global R&D projects, etc. He published over 100 academic papers and granted more than 10 patents.

Wudong Wang

In 2014, I graduated from the Medical device engineering major of Shanghai University for Science and Technology, majoring in rehabilitation engineering. I have 10 years of experience in rehabilitation product design and development.

In 2017, I joined Siyi Intelligence as a co-founder and currently serves as a senior product manager, leading the design and development of Siyi smart hand function series and brain-computer interface products and realizing mass production and launch, and applying for nearly 100 patents in total.

Zhiyong Wang

Zhiyong Wang received the Ph.D. degree in Shanghai Jiao Tong University, Shanghai, China，in 2023. He is currently an assistant Professor of Harbin Institute of Technology Shenzhen, Shenzhen, China. Shenzhen "Pengcheng Peacock Program" special position teacher Class C talent. He has been engaged in computer vision, intelligent algorithms and human-computer interaction technology applications. He has published 26 academic papers and 4 authorized invention patents. Participated in 1 national key research and development program, 1 National Natural Science Foundation International cooperation and exchange project, and 1 Shenzhen Science and Technology major project. Chaired special session on international conferences ICIRA 2023, ICIRA 2024 and SMC 2024.

Zhuo Wang

Zhou Wang, Male, born in March 1979, is a Ph.D. from the National University of Defense Technology, an associate professor, and a postdoctoral fellow of Brain Science and Cognitive Science. He is also a visiting scholar at Cardiff University. He currently serves as a researcher at the Hefei Intelligent Robot Institute, a standing committee member of the Rehabilitation Engineering and Assistive Technology Committee of the China Disabled Persons' Rehabilitation Association, and a director of the Hefei Autism Rehabilitation Association. He has long been engaged in research of brain-computer interfaces and intelligent robots, undertaking more than twenty projects such as the "973" program, the National Key R&D Program, the "863" key projects, the National Science and Technology Major Projects, and the National Natural Science Foundation. He has published 7 papers in the SCI, one of which ranks in the top 10% in the ESI subject, and has been granted 15 patents. He has won the first prize for Technical Invention of the "Mechanical Industry Science and Technology Award" and the second prize for scientific and technological progress in Hunan Province, and was selected as an innovative and entrepreneurial talent in Jiangsu Province in 2020. His current research focuses on biomarkers for autism and intelligent intervention technology.

Dapeng Wei

Dapeng Wei, researcher, doctoral supervisor, Director of Robot Technology and System Center of Chongqing Institute of Green Intelligent Technology, Chinese Academy of Sciences, Deputy Director of Chongqing Key Laboratory of Service Robot General Technology, Western Light Scholar of Chinese Academy of Sciences, Chongqing Talent, winner of Chongqing Outstanding Youth Fund. In 2009, he received his PhD from the Key Laboratory of Physics and Chemistry of Nanodevices, Department of Electronics, Peking University. After graduation, he worked in China Electronics Technology Group Corporation, Birck Nanotechnology Center of Purdue University, and Chongqing Research Institute of Chinese Academy of Sciences. He is mainly engaged in the research of flexible sensing technology. He has presided over 863 sub-projects of the Ministry of Science and Technology, National Natural Science Foundation of China, Chongqing Outstanding Youth Fund and other projects, published 72 papers in SCI journals, and applied for more than 50 invention patents. He won the first prize of Wu Wenjun Artificial Intelligence Science and Technology Progress Award (the first completion adult), the first prize of Chongqing Technical Invention (the third completion adult), and the second prize of Chongqing Natural Science Award (the first completion adult).

Ta-Sen Wei

Prof. Dr. Ta-Sen Wei is a specialist in physiatry, having worked at Changhua Christian Hospital (CCH) for more than 30 years. He currently serves as the president of the Taiwan Society of Rehabilitation Engineering and Assistive Technology (TREATS) and the chief of the Rehabilitation Medicine Research Center at CCH.

Prof. Wei graduated from China Medical University in Taiwan with a Bachelor of Medicine degree in 1976. Since 1982, he has been an attending physician in the Department of Physical Medicine and Rehabilitation at CCH. He later obtained a PhD in Biomedical Engineering from National Taiwan University.

Specializing in neurological rehabilitation, motor control, fall prevention, and the R&D of assistive devices, Prof. Wei established an assistive device center and a fall prevention center at CCH to provide the best services for patient outcomes. He has published hundreds of papers and holds dozens of patents in rehabilitation medicine. With a wealth of clinical experience, he combines physiatry and rehabilitation engineering to enhance patients' functionality, life independence, and quality of life.

In his presentation, Prof. Dr. Wei will discuss assistive technologies ranging from simple tools to sophisticated devices, the experience of establishing an assistive technology center in a tertiary hospital, and the challenges and ethical considerations in assistive technology.

Luc de Witte

Luc de Witte is a professor of Technology for Healthcare at The Hague University of Applied Sciences in the Netherlands. Earlier in his career he worked as professor of Health Services Research within the Centre for Assistive Technology and Connected Healthcare (CATCH) at the University of Sheffield in the UK and as Professor of Technology in Care at Maastricht University and Zuyd University of Applied Sciences in the Netherlands. He was also director of an innovation centre (EIZT: www.eizt.eu) connecting about 35 partners in healthcare, industry and academia, and he chaired the national Centre for Care Technology Research in the Netherlands.Luc is currently president of the Global Alliance of Assistive Technology Organisations (GAATO).Luc trained as a medical doctor, but has always worked on practice oriented research in the field of rehabilitation and long term care, including elderly care, care for people with intellectual or physical disabilities and care for people with chronic diseases. Luc has been involved in a large number of research and development projects. They all had a practice oriented character and aimed to generate knowledge to support care practice and policy. Main themes in his research are: assistive technology service delivery, development and evaluation of e-health applications, care robotics, technology-supported care innovations for low resource settings. His work is largely international. Luc has successfully supervised 37 PhD students and co-authored more than 300 publications in international peer reviewed journals. He also contributed to the writing of the Global Report on Assistive Technology (WHO/UNICEF, 2022).

Chung Kin Wong

Ken Wong Chung Kin, a renowned designer in Hong Kong, graduated with a Master's degree in Design from the Hong Kong Polytechnic University. Ken has been working in design in Hong Kong and the Mainland China for over 20 years. The products he has worked on involve multiple fields, including IT products, smartphones, lighting, power tools, home appliances, gifts, furniture, etc. In the past so many years of design experience, Ken has provided professional consulting services such as market analysis, user research and innovative design solutions, etc. for many global enterprises around the world, including Xiaomi, HP, Dell, Lenovo, IKEA, Bosch, Pansonic, Oppo, Haier, Jiuyang, Subor, Bull, Umbro, etc.,. In these years, the products designed by Ken have won more than thirty international design awards such as Red Dot Design Award, iF Design Award, Good Design Award, IDEA······etc.

Ken joined Shanghai Chunmi Technology (Xiaomi Ecological Chain Company) in 2016 as the head of the industrial design department. When the Mijia induction cooker he designed for Xiaomi was launched at the end of 2017, it sold out as soon as it went on sale, becoming a popular product of Mijia, with a total sales volume of over one million units.

Chunmi Technology released its own brand TOKIT in 2019. The design team led by Ken, designed the first series of TOKIT with a total of 7 products has won the company a total of 27 world-renowned design awards. By 2022, products designed by the team has won over fifty awards.

In early 2023, Ken serves as the head of industrial design at Kepler, responsible for the design of humanoid robots. From a designer's perspective, he will be driven by design innovation to prepare for future ground manufacturing.

Simon Wong

Simon is an experienced occupational therapist in Hong Kong with more than 40 years of working experience. He was graduated from the Occupational Therapy Course of the Hong Kong Polytechnic in 1981. He had worked in different rehabilitation fields, including psychiatry, orthopedics, geriatrics and community. He was the department manager of the Occupational Therapy Department at Prince of Wales Hospital and Tai Po Hospital in Hong Kong. His academic interests include cognitive and functional assessment, quality of life, management, information systems, and philosophy. He creatively apply the above knowledge combination in occupational therapy. He has published paper related to domiciliary occupational therapy, cognitive function assessment, splint design and fabrication, ADL assessment and training, stroke rehabilitation and occupational science. In assistive technology, he was the president of the Coalition of Rehabilitation Engineering and Assistive Technology in Asia in 2022.

Simon is enthusiastic about promoting the occupational therapy as a profession in Mainland China. He founded the Hong Kong Institute of Occupational Therapy in 2002 to provide occupational therapy training for Mainland therapists. He is currently an Advisor to the Occupational Therapy Professional Committee of the Chinese Association of Rehabilitation Medicine.

Chunmao Wu

He is currently a professor and doctoral supervisor at the Department of Product Design, College of Fashion & Design, Donghua University. He has been awarded the Shanghai Pujiang Talent Plan and the Shanghai Chenguang Plan. He is a member of the Design Education Committee of the China Industrial Design Association, chief designer of the Shanghai Municipal Design Innovation Center, and researcher in the Intelligent Wearable Design Team in the top discipline of Shanghai Design Studies. He is also an editorial board member and/or a reviewer for international journals (e.g., Text RES J, J FASH MARK MANAG, etc.). He has hosted and/or participated in more than 30 scientific research projects, which were supported by National Social Science Funding, Shanghai Science and Technology Commission, Shanghai Municipal Human Resources and Social Security Bureau, Shanghai Municipal Cultural and Creative Industry Foundation, Shanghai Municipal Education Commission, and Shanghai Municipal People's Government Development Research Center. He has published 45 academic papers, which indexed by SSCI, A&HCI, SCI, et al. He has published 4 books. His design works have won more than 100 well-known design awards, such as Red Dot Design Award, IF Design Award, IDEA Design Award, and so on.

Langlong Wu

Wu Langlong, Professor, Chief Physician, Master's Supervisor, Director of the Rehabilitation Center at Jiangxi Province Children's Hospital, proficient in the diagnosis and treatment of pediatric neurological diseases, especially skilled in the diagnosis, assessment, and treatment of various pediatric motor disorders, speech disorders, autism spectrum disorders, cognitive disorders, intellectual disabilities, tic disorders, hyperactivity disorders, learning disabilities, and epilepsy.

Society Positions:

Director of the Pediatric Rehabilitation Professional Committee, Jiangxi Provincial Rehabilitation Medical Association

Director of the Pediatric Rehabilitation Professional Committee, Jiangxi Provincial Children's Medical Alliance

Sixth Council Member of China Disabled Persons' Rehabilitation Association

Standing Committee Member of the Rehabilitation Professional Committee for Cerebral Palsy and Developmental Disorders, China Disabled Persons' Rehabilitation Association

Standing Committee Member of the Pediatric Rehabilitation Professional Committee, China Maternal and Child Health Association

Deputy Director of the Autism Spectrum Disorders Committee, Jiangxi Provincial Rehabilitation Medical Association

Deputy Director of the Cerebral Palsy Professional Committee, Jiangxi Provincial Disabled Persons' Rehabilitation Association

Committee Member of the Pediatric Rehabilitation Professional Committee, China Rehabilitation Society

Deputy Director of the Medical Rehabilitation Institution Management Professional Committee, Jiangxi Provincial Hospital Association

Standing Committee Member of the Physical Medicine and Rehabilitation Branch, Jiangxi Provincial Medical Association

Standing Committee Member of the Social Work Committee, China Rehabilitation Medicine Association

Committee Member of the Dysphagia Rehabilitation Professional Committee, China Rehabilitation Medicine Association

Committee Member of the Pediatric Rehabilitation Professional Committee, Futang Children's Medical Development Research Center

Committee Member of the Rehabilitation and Neuroregeneration Study Group, Pediatric Clinical and Health Branch, China Eugenic Science Association

Executive Director of the Third Council of the Jiangxi Provincial Rehabilitation Medical Association

Standing Committee Member of the Neurorehabilitation Professional Committee, Jiangxi Provincial Neuroscience Society

Standing Committee Member of the Bone and Joint Disease Professional Committee, Jiangxi Provincial Rehabilitation Medical Association

Xinyu Wu

PhD supervisor, researcher fellow, recipient of the National Outstanding Youth Fund, leader among the National Ten Thousand Talents Program, and a member of the Expert Group for the Intelligent Robotics Special Project under China's National Key R&D Program during the 13th and 14th Five-Year Plans. Currently, Dr. Wu serves as the Deputy Director of the Institute of Integration Technology at the Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, the Director of the Center for Intelligent Bionics, and the Head of the Guangdong Provincial Key Laboratory of Intelligent Robots and Systems. Currently, his primary research focuses on the fundamental theories and key technologies of human-robot integrated service robots. He has published over 260 papers in prestigious international journals such as IEEE Transactions on Robotics (TRO), IEEE Transactions on Automation Science and Engineering (TASE), IEEE Transactions on Industrial Electronics (TIE), and IEEE Transactions on Systems, Man, and Cybernetics (TSMC), as well as in major international robotics conferences including ICRA and IROS. He has also authored two English monographs. Dr. Wu has consistently been included in Stanford University and Elsevier's global list of the top 2% most influential scientists. He was ranked first in receiving the First Prize of Guangdong Province Science and Technology Progress Award (2022), the First Prize of Science and Technology Award from the China Instrument and Control Society (2018), and the First Prize of Shenzhen Science and Technology Progress Award (2018), among other scientific research accolades. He serves as a Council Member of the Chinese Association of Automation and the Council Member of the China Instrument and Control Society. Additionally, he has been appointed as a Distinguished Professor under the Pengcheng Scholar Program in Shenzhen.

Xuehai Wu

Professor of Neurosurgery at Huashan Hospital Affiliated to Fudan University, and Deputy Director of Shanghai Neurosurgery Emergency Center. Mainly focusing on the research of mechanism, diagnosis, and neuromodulation for severe Disorders of Consciousness. His DOC papers have been released in Nature Neuroscience, Annals of Neurology, Journal of Neuroscience, Cell Reports, Neuroimage, Human Brain Mapping, etc. His research findings on DOC were rated as one of the six major advances in Chinese neuroscience in 2020 by the Chinese Society of Neuroscience. As the first project leader, I have undertaken multiple research projects including the National Natural Science Foundation of China, the Natural Science Foundation of the Shanghai Municipal Science and Technology Commission, the Shanghai International Cooperation Project, and Subtopic of the 863 Project from the Ministry of Science and Technology; As first patent holder owns 8 patents. Participated in the compilation of multiple neurosurgical works, including "Clinical Case Consultation and Review - Neurosurgery Volume", "Modern Neurosurgery" Second Edition, and "Traumatology - Fundamentals and Clinical Practice" etc.

Yi Wu

Professor Yi Wu presided over 9 national natural science foundations, 1 high-tech research program of the Ministry of Science and Technology (863 Program), 1 sub-project of national key R&D project, 1 special development project of rehabilitation medicine department of important weak discipline in Shanghai, 4 key clinical research projects of Shanghai Science and Technology Commission, 1 important weak discipline (rehabilitation medicine) project of Shanghai Health Planning Commission, and 1 project of promotion and training of community rehabilitation service for stroke of World Health Foundation (HOPE Foundation). Editor-in-chief of more than 10 professional books and popular science books. Professor Wu presided over two national continuing education projects. Professor Wu has served as the editorial board of various medical journals, including the deputy editor-in-chief of Chinese Journal of Physical Medicine and Rehabilitation, the deputy editor-in-chief of China Journal of Rehabilitation Medicine and Journal of Rehabilitation, the editorial board of China Journal of Sports Medicine, journal of neurology and neurorehabilitation and China Journal of Clinical Neurology. Published more than 200 academic articles. Eight authorized invention patents and utility model patents were obtained. Professor Wu has won the second prize of National Science and Technology Progress Award (the eighth finisher), the second prize of China Medical Science and Technology Award (the first finisher), the first prize of Science and Technology Progress Award of China Rehabilitation Medical Association (the first finisher), the second prize of Science and Technology Progress Award of the Ministry of Education (the second finisher), the second prize of Shanghai Science and Technology Award (the second finisher), the second prize of Huaxia Medical Science and Technology Award, etc., and won the Shanghai May 1st Labor Medal and the third finisher.

Zonghui Wu

Chief Physician, Professor, Doctoral Supervisor. He is the Secretary of the Party Committee of Southwest University Hospital, the Director of the Institute of Exercise Rehabilitation of Southwest University, and the Editor-in-Chief of the Journal of Health Medicine Research and Practice.
He is the deputy director of the Recreation and Nutrition Working Committee and the deputy director of the Exercise Rehabilitation Specialised Committee of the Chinese Association of Rehabilitation Medicine, the executive vice president of the Health Care Medicine Branch of the China Association of Higher Education, the chairman of the Chongqing School Health Association, the executive vice president of the Chongqing Pension Service Association, and the chairman of the Exercise and Injury Rehabilitation Specialised Committee of the Chongqing Association of Rehabilitation Medicine. He is a member of the first National University Health Education Teaching Steering Committee, a member of the National Health Science Expert Database, and a member of the first batch of Chongqing Health Science Expert Database. He is also the head of the key construction discipline of Chinese medicine rehabilitation in Chongqing, and one of the first batch of famous doctors in Beibei District's "Three Project".
He has presided over more than 30 projects, published more than 100 academic papers, 10 monographs and textbooks, 8 national invention patents and utility model patents, and

Chai Wutiwiwatchai

Dr. Chai Wutiwiwatchai is currently Executive Director of National Electronics and Computer Technology Center (NECTEC) under National Science and Technology Development Agency (NSTDA). His expertise covers Digital Speech and Language Processing, Human-Computer Interaction, and Artificial Intelligence. He has joined various national and international collaborative projects in language and speech processing. He led the development of ThaiMOOC, a Massive Open Online Course system of Thai Cyber University (TCU). He has got the runner-up award of the Outstanding Technologist from the Foundation for the Promotion of Science and Technology under the Patronage of H.M. the King in 2015. At present, he also serves as a management committee of Electronic Transactions Development Agency, Digital Government Development Agency, Broadcasting and Telecommunications Research and Development Fund for Public Interest. He has also played an important role in driving the Sustainable Manufacturing Center at Eastern Economic Corridor of Innovation (EECi) in 2019. He has been an assistant secretary of the Thailand National AI Strategy committee since 2022 and the Thai parliament AI commissioner in 2024.

Ning Xi

Ning Xi received his D.Sc. degree in Systems Science and Mathematics from Washington University in St. Louis, Missouri, USA in December 1993. Currently, he is the head of Department of Industrial and Manufacturing Systems Engineering, the Director of Advanced Technologies Institute and Chair professor of Robotics and Automation at the University of Hong Kong. He was a University Distinguished Professor, the John D. Ryder Professor of Electrical and Computer Engineering and Director of Robotics and Automation Laboratory at Michigan State University. Dr. Xi was awarded SPIE Nano Engineering Award in 2007. In addition, he is a recipient of US National Science Foundation CAREER Award. Dr. Xi is a fellow of IEEE. He also served as the President of IEEE Nanotechnology Council (2010-2011) and the President of IEEE Robotics and Automation Society (2018). His research interests include robotics, manufacturing automation, micro/nano manufacturing, nano sensors and devices, nano bio system applications, and intelligent control and systems.

Rong Xiao

Doctor of Law from East China University of Political Science and Law, previously worked for state-owned enterprises, listed companies, and industry organizations. Currently serves as the Chairman of Shanghai Xuankang Robost Co., Ltd., a member of the Shanghai Rehabilitation Equipment Association, and Vice President of the Pudong New Area Elderly Care Industry Promotion Association in Shanghai.

Ping Xie

Ping Xie, Ph.D. Professor and Doctoral Supervisor. Academic Leader of the Hebei Key Laboratory of Intelligent Rehabilitation and Neural Regulation. She is a standing member of the Brain-Computer Interface and Rehabilitation Committee of the Chinese Association of Rehabilitation Medicine, a member of the Intelligent Health and Bioinformatics Committee of the Chinese Association of Automation, and a member of the Rehabilitation Engineering Branch of the Chinese Society of Biomedical Engineering. Additionally, she is a director of the Zhongguancun Medical Device Alliance and the Hebei Biomedical Engineering Society.

Professor Xie's research focuses on brain-computer interfaces and intelligent rehabilitation, multimodal neural information processing, neural regulation, rehabilitation robotics, and hybrid brain intelligence. She has led over 20 national and provincial-level projects, including key projects funded by the National Natural Science Foundation. Her prolific contributions to the field are evidenced by over 80 publications in esteemed journals such as Neuroimage: Clinical, IEEE transactions on Transactions on Biomedical Engineering, Journal of Neural Engineering , IEEE Transactions on Neural Systems and Rehabilitation Engineering and so on, and she holds more than 20 authorized invention patents. She also serves as a reviewer for journals including IEEE Transactions on Cognitive and Developmental Systems, Frontiers in Neuroscience, Acta Physica Sinica, Acta Automatica Sinica and so on.

Qing Xie

Professor Qing Xie is currently the Director of the Department of Rehabilitation Medicine at Ruijin Hospital, Shanghai Jiaotong University School of Medicine, Vice President of Shanghai Ruijin Rehabilitation Hospital, and Director of the Department of Rehabilitation Medicine at Shanghai Jiaotong University School of Medicine. She has been devoted to the clinical and basic research of central and peripheral nerves, musculoskeletal diseases for a long time. The research direction mainly includes: the effect and mechanism of non-invasive brain stimulation such as transcranial magnetic stimulation and transcranial direct current stimulation in promoting the recovery of motor function after stroke; the clinical study of upper limb rehabilitation robot-assisted stroke rehabilitation; the clinical study of motor imagery and virtual reality in promoting the recovery of motor function; the role of functional near-infrared spectroscopy (fNIRS) in the evaluation of limb function recovery and rehabilitation therapy protocol designation; and the application value of motor unit assessment (CMAP) in peripheral nerve injury. She is currently a permanent member of the Physical Medicine and Rehabilitation Branch of the Chinese Medical Association, a permanen member of the Rehabilitation Physicians Branch of the Chinese Medical Association, the Chairman of the Electrodiagnostic Committee of the Chinese Rehabilitation Medical Association, the Vice President of the Rehabilitation Branch of the Chinese Society of Geriatrics, the Chairman of the Physical Medicine and Rehabilitation Section of the Shanghai Medical Association, and the Chairman of the Rehabilitation Branch of the Shanghai Medical Association. She was awarded the fourth "Famous Doctor of China", Shanghai "Compassionate Doctor - Excellent Specialist", "Leading Specialist Rehabilitation - Excellent Leader", "Shanghai Regional Famous Doctor" and other titles. Scientific research awards: First Prize of "Blooming Cup" 5G Application by MIIT; First and Second Prizes of Shanghai Rehabilitation Medicine Science and Technology.

Shengquan Xie

Professor Shane (Sheng Quan) Xie has over 30 years of research experience in the field of robotics and exoskeletons. He is currently a Chair Professor of Robotics and Autonomous Systems, Director of the Mechatronics and Robotics programme and Director of the Rehabilitation Robotics Lab at the University of Leeds, and was previously the Director of the Rehabilitation and Medical Robotics Centre at the University of Auckland. He has published > 500 refereed papers and 8 books in rehabilitation exoskeleton design and control, neuromuscular modelling, and advanced human-robot interaction. He established the world-first Masters programme in Medical Devices and Technologies in 2010 involving 10 medical devices companies and researchers from both engineering and medical fields. He was a Technical Editor for the IEEE/ASME Transactions on Mechatronics and is the editor-in-chief for the International journal of Biomechatronics and Biomedical Robotics. He led many government funded research projects as principle investigator and has completed over 50 funded research projects totalling over £30M of research contracts from government granting agencies and industries. He has had over 15 post docs, 60 PhDs and 80 postgraduate students and his team has invented three award-winning rehabilitation exoskeletons and developed iterative learning algorithms for exoskeletons to interact with patients. He has conducted extensive clinical studies of robot-assisted rehabilitation on stroke patients, and has strong links with clinical, industry and research affiliates in the medical space and world leading hospitals throughout NZ, Asia, US and Europe. He is an elected Fellow of Royal Society of New Zealand, Fellow of Engineering New Zealand, Fellow of IEEE, ASME and the Institution of Mechanical Engineers UK.

Rong Xiong

Rong Xiong is Qiushi Distinguished Professor at Zhejiang University, Director of Zhejiang Humanoid Robot Innovation Center, Fellow of China Automation Society, expert member for the National Key Research and Development Program on Intelligent Robots, organization chair of IROS 2025, member of international trustee committee of RoboCup, and associate editor of IET Cyber-Systems and Robotics. Since 2000, she has been conducting research in the field of intelligent mobility and manipulation for robots in complex environments.She has led more than 20 national and provincial-level projects, including the 2030 New Generation Artificial Intelligence Major Project. Her important breakthroughs include robust balance control for legged robots, robust localization and navigation for mobile robots, and skill learning for manipulation robots. She has developed humanoid robots capable of playing table tennis with humans, and can walk rapidly and stably indoors and outdoors. She has published over 100 papers in prestigious journals such as Nature Communication, IJRR, TPAMI, TRO, etc., as well as conferences like ICRA, IROS, CVPR, etc. She holds more than 60 national patents, 3 international patents, and 2 national standards. Her technology has been applied in various fields, including industry, special applications, aerospace, and unmanned driving. She has also nurtured new products such as intelligent inspection robots and intelligent logistics robots (AMR), which have been widely used in substations and factories. She has received the First Prize of the Zhejiang Province Science and Technology Award, the Second Prize of the National Teaching Achievement Award, the May 1st Women's Medal, and other awards.

Dongsheng Xu

Professor of Rehabilitation Medicine and Doctoral Supervisor at Shanghai University of Traditional Chinese Medicine. Vice Dean of Rehabilitation Medicine College, Shanghai University of Traditional Chinese Medicine. Executive Director of the Engineering Research Center of the Ministry of Education for Traditional Chinese Medicine Intelligent Rehabilitation. Director of Rehabilitation Center/Rehabilitation Department of Yueyang Integrated Traditional Chinese and Western Medicine Hospital Affiliated to Shanghai University of Traditional Chinese Medicine. Editor in Chief of Brain Network and Modulation English Magazine. Deputy Director of Rehabilitation Medicine Research Institute of Shanghai Institute of Traditional Chinese Medicine. Vice President of Rehabilitation Physicians Branch of Shanghai Medical Association. Vice Chairman of the Brain Function Detection and Regulation Professional Committee of the Chinese Rehabilitation Medicine Association.

Hosted one major research program of the National Natural Science Foundation of China and five general projects; Participated in four major, 973, and key R&D programs of the Ministry of Science and Technology, and served as the project leader for the Key R&D Program (Active Health) of the Ministry of Science and Technology in 2020 and 2023. Won the first prize of Huaxia Medical Technology in 2019. Mainly engaged in basic research, transformation medicine, and clinical practice of neural modulation rehabilitation, neural regeneration repair, and intelligent motor rehabilitation

Yanwei Xiang

Xiang Yanwei, Chief Physician and Master's Supervisor, Secretary of the Party Committee, and Vice Dean of the School of Rehabilitation Science at Shanghai University of Traditional Chinese Medicine. Research direction: Traditional Chinese Medicine in the Prevention and Treatment of Skin Diseases, and Artificial Intelligence in Diagnosis and Treatment. Positions held include: Supervisor for the Chinese Society of Integrated Traditional Chinese and Western Medicine, Deputy Secretary-General of the Shanghai Society of Integrated Traditional Chinese and Western Medicine, Vice Chairman of the Dermatology Branch of the Shanghai Society of Traditional Chinese Medicine, member of the Beauty Branch of the Shanghai Society of Traditional Chinese Medicine, and member of the Dermatopharmacology Professional Committee of the Shanghai Pharmacological Society; Vice Chairman of the Shanghai Association of Young University Educators.

Fan Xu

Dr. Fan Xu, tenure-track assistant professor of Department of Automation, Shanghai Jiao Tong University. Her research focuses on the modeling and control of soft robots. She leads the Youth Fund of NSFC and participates in various NSFC projects, including key and general projects. She has published 11 first-author or corresponding author journal articles (including in the IEEE Transactions and Soft Robotics) and 4 conference papers (IROS, ICRA). Her related research has received several honors, including the 2019 TMECH Best Paper Finalist (first author) and the 2021 First Prize from the China Invention Association (ranked 5/5).

Heng Xu

Dr. Heng Xu is currently employed in the Department of Plastic and Reconstructive Surgery at the Ninth People's Hospital. He is a recipient of the Youth Talent Support Program by the China Association for Science and Technology, the "Medical New Star" of Shanghai, and the "Sailing Program" of Shanghai. His expertise includes soft tissue organ reconstruction, peripheral nerve function reconstruction, and scar diagnosis and treatment. Dr. Xu has developed or improved three surgical techniques, published 29 SCI papers, led seven research projects at various levels, and applied for five patents. His research focuses on elucidating the mechanisms and developing drugs for scar formation and peripheral nerve function recovery.

Jianguang Xu

Jianguang Xu, MD, PhD, is a professor, chief physician, and doctoral supervisor. He is Former President of Shanghai University of Traditional Chinese Medicine. He serves as the Vice President of the Chinese Medical Doctor Association, President of the Shanghai Medical Doctor Association, and Honorary Lifetime President of the Shanghai Rehabilitation Medical Association. He is currently the Director of Engineering Research Center of Traditional Chinese Medicine Intelligent Rehabilitation, Ministry of Education; Principal Professor of Shanghai University of Traditional Chinese Medicine; a PI at Shanghai University of Traditional Chinese Medicine, and the chief expert of the rehabilitation discipline at Yueyang Hospital. He has been recognized by the Cross-Century Talent Program of the Ministry of Education, Shanghai Excellent Discipline Leader Program, and Shanghai Medical Leading Talent. Dr. Xu has long been engaged in research on neural injury-repair and brain plasticity, innovative neuro-modulation methods based on neural circuits, and brain-muscle-machine interface exoskeletons. He has published over 160 papers in SCI journals such as the Journal of Neurology, Neurosurgery & Psychiatry, Alzheimer's Research & Therapy, Diabetes, and Obesity. He has led the National Key Research and Development Program of the Ministry of Science and Technology, the National Natural Science Foundation, Shanghai Innovative Medical Device Application Demonstration Project, Major Projects in the Field of High-tech of Shanghai, and Shanghai's Major Application Scenarios of the Metaverse Project.

Jiang Xu

Professor and doctoral supervisor at the College of Design and Innovation, Tongji University, director of the "Design Engineering and Computing Laboratory" and director of the "China Good Design" Research Center. He hosted general and youth projects of the National Natural Science Foundation of China, major consulting projects and key consulting projects of the Chinese Academy of Engineering, late-stage funding plans of the National Social Science Fund, sub-topics of the National Key Research and Development Plan, late-stage funding projects of Philosophy and Social Sciences of the Ministry of Education, new Liberal Arts Reform and Practice Projects of the Ministry of Education, Academic Style Construction Funding Project of China Association for Science and Technology, Liberal Arts Major Funding and Cultivation Project of Tongji University etc. He has published more than 40 SCI/EI/CSSCI papers in important domestic and foreign journals.

Jin Xu

Professor, PhD supervisor. She is Chairman of the Department of Biomedical Engineering and deputy director of the Institute of Health and Rehabilitation Science at Xi'an Jiaotong University. Meanwhile, she is Vice Chairman of the Professional Committee on Rehabilitation Engineering and Industry Promotion of the Chinese Association of Rehabilitation Medicine, and standing committee of the Professional Committee on Brain Function Detection and Regulation of the Chinese Association of Rehabilitation Medicine. She is Vice Chairman of the Professional Committee on Rehabilitation Engineering of the Shaanxi Association of Rehabilitation Medicine. She serves as an evaluation expert for key research projects of the Ministry of Science and Technology, the Ministry of Industry and Information Technology, and National Natural Science Foundation of China.

She is mainly engaged in scientific research and product development in biomedical signal processing, cognitive and motor dysfunction detection and intelligent assessment, neurorehabilitation engineering, human-computer interaction technology, and real-time decoding of motor intent. As the person in charge, she has undertaken more than ten national and provincial projects, such as National Key Research and Development, National Natural Science Foundation of China, International Cooperation Project, etc. She has published more than fifty academic papers in domestic and international famous academic journals as the first/ corresponding author, she has been authorized 9 invention patents, and more than 10 software copyrights as the first complete person.

Qihua Xu

President of Shanghai Senior Care Service Industry Association, Secretary-General of Shanghai Senior Care Service Standardization Technical Committee, special expert of Expert Advisory Committee of China Association of Social Welfare and Senior Care Service, member of Expert Working Committee of China Aging Industry Association, Shanghai government procurement evaluation expert, Chairman of Yangtze River Delta Association for Senior Care.

He has successively served as the main leader of Shanghai Social Welfare Center, Shanghai Aging Development Center, Shanghai Aging Scientific Research Center, and Shanghai Community Service Center. Analysis of Common Problems in Elderly Care Institutions; Editor-in-chief of "Practical Manual of Service Management for Elderly Care Institutions" and "Management Guide for Deans of Elderly Care Institutions in the New Era"; To preside over the compilation of the development report on the cause of aging in Shanghai; To organize the monitoring statistics and analysis of the elderly population in Shanghai; To participate in the formulation of the development plan for the cause of aging in Shanghai; With a solid theoretical foundation and rich practical experience, he has won the honorary title of advanced individual in aging work in Shanghai and the whole country.

Tiantian Xu

Tiantian Xu is currently Professor in Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences. She received the Ph.D. degree at University of Pierre and Marie Curie, Paris, France. Her research interests are currently focused on magnetic microrobots, soft robots, medical robots, and etc. She has published over 20 IEEE Transactions papers, including TRO, T-cyber, TMECH, TASE, 6 of them are ESI high cited papers. She has received the NSFC excellent young scholar in 2020, the best application paper award in IROS2019, and the Second Prize of Wu Wenjun Natural Science of Artificial Intelligence in 2021 as first author, CAA Young Scientist. She is associate editor for TRO, TASE and RAL.

Banghua Yang

Yang Banghua, Professor, Doctoral Supervisor, Double Appointed Professor at the School of Mechanical and Electrical Engineering and Automation of Shanghai University, Director of the Cross Research Center for Artificial Intelligence and Medical Engineering, Director of the Brain Computer Engineering Research Center, recipient of the May Day Labor Medal in Shanghai, March 8th Red Flag bearer in Shanghai, Provincial and Ministerial level Talent. Vice Chairman of the Trustworthy Intelligence Committee of the Shanghai Artificial Intelligence Society, Vice Chairman of the Brain Computer Interface and Rehabilitation Committee of the Chinese Rehabilitation Medicine Association, Member of the ISO/IEC JTC1 Brain Computer Interface Chinese Expert Committee, Member of the Brain Computer Interface and Brain like Intelligence Professional Committee of the Chinese Standardization Association, and Deputy Editor in Chief of IEEE TNSRE. Hosted one key research and development project of the Ministry of Science and Technology of China, as well as more than 10 national level projects funded by the National Natural Science Foundation of China. The research work has been published in well-known journals such as Neural Networks, IEEE TNSRE, Neurocomputing, etc. More than 150 academic papers have been published, and more than 10 patents have been granted. Relevant research has been interviewed and reported by CCTV-1, CCTV-9, and CCTV-17.

Bin Yang

Yang Bin is the Director of the Smart Health Research Center of the Institute for Precision Medicine of Tsinghua University, and also serves as the Deputy Director of the Institute for Network Behavior of Tsinghua University.

His social part-time jobs include Distinguished Professorr of Oxford Octa Laboratory in Digital Economics of Oxford University, Executive Director of China Research Hospital Association, Vice President of Internet Hospital Branch of China Research Hospital Association, Joint Secretary General of China Smart Hospital Alliance, Vice Chairman of Intelligent Technology Working Committee of China Electronics Industry Federation, Vice Chairman of Remote Rehabilitation Special Committee of China Rehabilitation Medical Association, Visiting Professor of Artificial Intelligence Research Institute of Beijing Institute of Petroleum and Chemical Technology, and Editorial Board of Intelligent Medicine.

Yang Bin is committed to applying artificial intelligence, big data and other technologies to research comprehensive solutions in the field of health and medical care. He has led and participated in the planning and implementation of multiple national level projects, and has achieved a lot of application results in health monitoring and management, remote medical rescue, smart medical services, and major event support. Currently, he is responsible for the implementation and deployment of the THIS Tsinghua Intelligent Health and Medical Service System. Received the first prize three times at the provincial and ministerial level, and the second prize once.

Hongbo Yang

Yang Hongbo, Ph.D. supervisor. He is a leading expert in the field of rehabilitation engineering, a core key talent as a specially-appointed researcher at the Chinese Academy of Sciences, and a recipient of a special government allowance from the State Council. Currently, he serves as the Director of the Suzhou Key Laboratory of Rehabilitation Engineering, a Professor at the University of Science and Technology of China, the Director of the Biomedical Engineering Institute at the Jiangsu Industrial Technology Research Institute, a standing committee member of the Professional Committee of Technology Transformation and Industrial Promotion of the Chinese Association of Rehabilitation Medicine, and a member of the Expert Group on Proactive Health and Aging Technology Response of the Ministry of Science and Technology. His primary academic focus is on rehabilitation medical engineering technology. Yang Hongbo has been long engaged in the development of rehabilitation training and assessment equipment for motor and cognitive dysfunction, medical flexible sensors, intelligent rehabilitation robots, and smart health care products. As the chief scientist, he has led and undertaken over 20 major projects at the national, provincial, and CAS levels, including multimodal intelligent mobile walkers, agile elderly and disabled exoskeleton robots, intelligent assistance and monitoring systems for disabled elderly people, key technologies for skin-like flexible sensor brain-computer interfaces, and VR rehabilitation treatment systems for children with autism. He has published 57 academic papers in domestic and international journals, applied for and obtained 106 patents, and has supervised over 70 master's and doctoral students.

Hongjun Yang

Hongjun Yang, associate professor, master's supervisor, is currently working at the National Key Laboratory of Multimodal Artificial Intelligence Systems, Institute of Automation, Chinese Academy of Sciences. His research interests include: Multimodal assessment of motor cognitive function and development of intelligent rehabilitation system, human-computer interaction of medical robots, complex system modeling and control. He has published more than 40 academic papers in domestic and foreign journals and conferences such as IEEE Trans., Acta Automatica Sinica, and authorized more than 10 domestic patents and 1 international patent. He has presided over 8 national, provincial and ministerial projects, including the subject of National Key R&D Program , National Natural Science Foundation, Beijing Natural Science Foundation - Haidian Original Innovation Joint Fund project, and the key deployment project of the Chinese Academy of Sciences. At present, he is a member of the special Committee of Environmental Perception and Protection Automation of the Chinese Society of Automation, a member of the special committee of Adaptive Dynamic planning and reinforcement Learning, a member of the special committee of Intelligent robots of the Chinese Society of Artificial Intelligence, and a young editorial board member of the journal "Intelligence and Robotics".

Wenzhen Yang

Research Expert of Zhejiang Lab, Part-time Professor of Zhejiang University, Distinguished Professor of Hangzhou Normal University, and the Young and Middle-aged Expert with Outstanding Contribution to Zhejiang Province. His research interests focus on tactile human-computer interaction, Braille accessibility etc.

Prof. Yang has published more than 70 academic papers, owned over 40 national or international patents, and won 4 Zhejiang Provincial Science and Technology Awards. Some of his research achievements have been applied, and been reported by national media, such as Science and Technology Daily, China Daily, Xinhua News etc. He also currently serves as an Executive Committee Member of the Human-Computer Interaction Committee of China Computer Society, an Executive Committee Member of the Force Touch Perception and Interaction Committee of China Instrument and Control Society, a Committee Member of the Metaverse Technology of China Artificial Intelligence Society, and a Director of the Rehabilitation Assistive Devices Committee of of Zhejiang Province.

Huayuan Yang

Tenured Professor and Ph.D. Supervisor at Shanghai University of Traditional Chinese Medicine. Expert with special government allowance of the State Council, Shanghai Pioneering Talent. Recipient of the Baosteel Outstanding Teacher Award, leader of Key Discipline in Traditional Chinese Medicine (TCM) Engineering at the National Administration of Traditional Chinese Medicine, director of tertiary laboratory of TCM Engineering of the National Administration of Traditional Chinese Medicine.
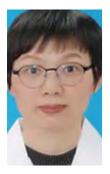
Presently serves as the Director of the Institute of TCM Engineering and the Executive Deputy Director of the Research Center for TCM Information Science and Technology at Shanghai University of Traditional Chinese Medicine. Primarily engaged in research on TCM engineering, development of diagnostic and therapeutic technologies and equipment, standards for acupuncture instruments, and research and teaching on acupuncture manipulation and acupuncture effects.

Currently serves as the Chairman of the TCM Engineering Branch of the Chinese Society of Biomedical Engineering (CSBE); the Director of the Acupuncture Equipment Professional Committee of the China Association of Acupuncture and Moxibustion; and the Deputy Director of the Traditional Chinese Medicine Diagnostic and Therapeutic Equipment Professional Committee of the World Federation of Chinese Medicine Societies.

Professor Yang has undertaken a total of 29 scientific research projects, including 1 project from the 'Twelfth Five-Year' Science and Technology Support Plan, 2 projects and topics from the 'Thirteenth Five-Year' National Key R&D Program, 1 special project from the National Traditional Chinese Medicine Public Welfare Industry Scientific Research, 6 projects from the National Natural Science Foundation of China, 1 sub-project of the National '973' Program, 2 projects from the National Key R&D Program of the Ministry of Science and Technology for the 'Thirteenth Five-Year', 2 projects from the National Administration of Traditional Chinese Medicine, 2 special projects from the Ministry of Education for doctoral programs, 1 project from the Shanghai Municipal Education Commission for the construction of knowledge innovation engineering, and 10 projects from the Shanghai Municipal Science and Technology Commission and Education Commission. He has won 9 provincial and ministerial-level awards for scientific and technological progress.

Published over 130 academic papers, edited 12 textbooks and treatises; obtained 20 national patents. Authored 8 textbooks and 7 treatises. Researched and formulated the ISO international standard 'Infrared Moxibustion-like Device for Traditional Chinese Medicine (ISO 20493)', and the National Standards Committee's 'Acupuncture Technique Operation Specifications Part 11: Electroacupuncture (GB/T 21709.11-2009)'.

Aiwen Yi

Dr. Yi Aiwen, chief physician, master tutor
The Third Affiliated Hospital of Guangzhou Medical University Huangpu District children's health care Department chief physician
Member of Autism Rehabilitation Committee, Chinese Rehabilitation Association
Member of Hearing and Speech Rehabilitation Education Group, Rehabilitation Medical Education Committee, Chinese Rehabilitation Medical Association
Member of the International Association for Autism Research (INSAR)
Standing member of Learning and Developmental Disability Rehabilitation Branch, Guangdong Rehabilitation Medical Association
Standing member of Rehabilitation Committee of Guangdong Acupuncture and Moxibustion Society
Director of Rehabilitation Treatment Branch and Community Rehabilitation Branch of Guangdong Rehabilitation Medical Association
Member of Speech Therapy Group, Physical Medicine and Rehabilitation Branch, Guangdong Medical Association
The Lancet Regional Health - Reviewer for Western Pacific Journal
Dr. Yi's current research focuses on children with Speech and Language Disorders and Autism Spectrum Disorders. She had published more than 10 SCI papers, and hosted 6 provincial projects.

Xu-Cheng Yin

Xu-Cheng Yin is a full professor and the dean of School of Computer and Communication Engineering, University of Science and Technology Beijing, China. He received the B.Sc. and M.Sc. degrees in computer science from the University of Science and Technology Beijing, China, in 1999 and 2002, respectively, and the Ph.D. degree in pattern recognition and intelligent systems from the Institute of Automation, Chinese Academy of Sciences, in 2006. He was a visiting professor in the College of Information and Computer Sciences, University of Massachusetts Amherst, USA, for three times (Jan 2013 to Jan 2014, Jul 2014 to Aug 2014, and Jul 2016 to Sep 2016).

His research interests include pattern recognition, computer vision, artificial intelligence, and their applications in industries. He has published more than 100 academic papers (IEEE T-PAMI, IEEE T-IP, CVPR, ICDAR etc.). From 2013 to 2019, his team had won the first place of a series of text detection and recognition competition tasks for 15 times in ICDAR Robust Reading Competition. He received the National Science Fund for Distinguished Young Scholars in 2021.

Ziming Yin

Associate Professor and Master's Supervisor at University of Shanghai for Science and Technology
Executive Committee Member of the Remote Rehabilitation Special Committee of the Chinese Rehabilitation Medicine Association
Member of the Headache and Sensory Disorders Professional Committee of the Chinese Research Hospital Association
Member of the Artificial Intelligence and Pattern Recognition Committee of the Chinese Computer Society
Personal Profile:
Engaged in research work related to rehabilitation informatization, intelligence, rehabilitation big data analysis, rehabilitation clinical decision support, and other related fields. The clinical decision support system developed has been practically applied in nearly 200 hospitals at all levels across the country, effectively improving the diagnostic level of doctors in primary medical institutions. As one of the main achievements, it won the second prize of the 2018 Chinese Medical Science and Technology Award. More than 50 high-level research papers have been published, and the papers have been selected as one of the top 100 excellent papers by the Chinese Medical Association in 2022. Hosted one National Natural Science Foundation project and two sub projects of the National Key Research and Development Program. Participated as a core member in seven national level projects, including the 863 Program, National Major Science and Technology Projects, and National Natural Science Foundation General Projects. Conducted four provincial and ministerial level projects, including the Shanghai Municipal Health Commission, Shanghai Municipal Commission of Economy and Information Technology, and Capital Health Development Research Project. Applied for 5 national invention patents and 14 computer software copyrights.

Haoyong Yu

Dr. Yu Haoyong is an Associate Professor of the Department of Biomedical Engineering at the National University of Singapore. He received his Bachelor's Degree and Master's Degree from Shanghai Jiao Tong University and his PhD degree from Massachusetts institute of Technology (MIT). His current research interests include biomedical robotics and devices, rehabilitation engineering and assistive technology, service robots, human robot interaction, intelligent control, and machine learning. His and his team have published more than 200 journal papers in robotics and control areas and have applied more than 20 international patents. Prof. Yu is currently the Associate Editors of IEEE Transactions on Automation Science and Engineering and IEEE/ASME Transactions on Mechatronics.

Hegao Yu

Secretary of the Party Branch and Deputy Director of the Community Health Service Centre of the Eighth Affiliated Hospital of Sun Yat-sen University, Chief Nurse, Guangdong-Hong Kong Joint Training of Community Nursing Specialist Nurses, Master's Degree holder, Clinical Co-supervisor of Master's Students, Futian Talent, National Primary Health Care Personnel Competency Enhancement Training Faculty, Guangdong Province Family Doctors' Team Training Faculty Pool Faculty. She is also the president of the Second Council of Shenzhen Family Physicians Association, the chairman of the Public Health Nursing Specialist Committee of Guangdong Nursing Association, a member of the Community Nursing Specialist Committee of the Chinese Nursing Association, the vice-chairman of Guangdong Nurses Association Community and Public Health Nurses Branch, and an advisor and adjunct professor of the Shenzhen Health Capacity Building and Continuing Education Centre. She has edited 3 monographs and published 32 papers (including 3 SCI papers); led the formulation of 1 local standard in Shenzhen, 1 Guangdong provincial group standard, and participated in the formulation of 5 industry and group standards at various levels; presided over and participated in more than 20 projects at all levels; obtained 4 patents; and obtained 2 software registration rights.

Jia Yu

Dr. Yu is an associate professor at Soochow University. He obtained a PhD degree from the HK PolyU, and was a visiting student/scholar at Mayo Clinic (2007) and Medical School of Harvard University (2022). His lab focuses on musculoskeletal biomechanics and 3D printing applications in rehabilitation engineering. Dr. Yu has published over 50 peer-reviewed papers and received several best paper awards, such as HKBME and ABAQUS. Dr. Yu is a member of rehabilitation engineering committee of China BME society and digital orthpaedics committee at SICOT China.

Ningbo Yu

Ningbo Yu is a professor at the College of Artificial Intelligence, Nankai University, deputy director of Engineering Research Center of Trusted Behavior Intelligence, Ministry of Education, and deputy dean of the Shenzhen Research Institute of Nankai University. He focused his research in robots and AI in medicine, and have conducted clinical studies on stroke, Parkinson's disease, consciousness disorders, etc. He is a member of the IEEE TEMS Technical Committee on Smart Medical Digitalization, a member of the Robotics Committee and the Robot Intelligence Committee of the Chinese Association of Automation, a member of the Teaching Committee of the Chinese Association for Artificial Intelligence, and a member of the Consciousness Disorders Branch of the Chinese Neuroscience Society.

Wei Yu

Currently holding the position of Distinguished Professor and Deputy Dean at the School of Art Design And Media, East China University of Science and Technology; having obtained a Ph.D. from Shanghai Jiao Tong University and engaging in part-time research activities; Doctoral supervisor, Royal University of Thailand; and acting as a Distinguished Visiting Research Fellow at the Illinois Institute of Technology (IIT), New Bauhaus.

Serving as a standing director of the National Cultural Think Tank Alliance, a director of the China Industrial Design Association, and vice chairman of the China Cultural Office Supplies Industry Association.

Acting as the chief editor for "China Industrial Design Blue Book" and "China IP and Internet Celebrity Economy Blue Book".

Being a member of the Beijing Xiangshan Forum on Design in China and a consultant for industrial design at the Ministry of Industry and Information Technology.

Serving as an expert reviewer for the National Teaching Achievement Awards, an art and science project reviewer, and a reviewer for the Academic Degrees & Graduate Education Development Center of the Ministry of Education.

Acting as an expert reviewer for the achievements of the Chinese Academy of Sciences' Think Tank.

Serving as the vice president of the Shanghai Industrial Art Design Association and the deputy director of the Art Committee of the Shanghai Higher Education Association.

Acting as the deputy director and dean of the Institute for Intellectual Property and Internet Economy Research at the Zhejiang Cultural and Creative Industry Planning and Technology Evaluation Center.

Serving as the founding deputy editor-in-chief of "Oriental Creative Studies" and an editorial board member of "International Journal of Design Science".

Invited expert for the 2010 Shanghai World Expo, and leading expert for the Outstanding Design Award; Co-hosting the major selection topic "Research on the Socialist Cultural Power" in the preliminary study for the 13th Five-Year Plan; leading and participating in multiple provincial and ministerial projects; winning dozens of domestic and international awards and patents; publishing more than ten books; and publishing over a hundred papers.

Wenwei Yu

Received B.Eng. and M.Eng. degrees from Shanghai Jiao Tong University in 1989 and 1992, respectively, a Ph.D. degree in system information engineering from Hokkaido University, Japan, in 1997, and a Ph.D. degree in Rehabilitation Medical Science, Hokkaido University, Japan, in 2003. He served as an Assistant Professor with the System Information Engineering Department, School of Engineering, Hokkaido University, from 1999 to 2003. He was an Exchange Research Fellow with the Center for Neuroscience, University of Alberta, Canada, in 2003, supported by the Researcher Exchange Program, Japanese Society for Promotion of Science (JSPS). He has been an Associate Professor with the Department of Medical System Engineering, School of Engineering, Chiba University, Japan, since 2004 and has also been a Professor since 2009. Since 2006, he has been with the AI Lab, Zurich University, Switzerland, as a Visiting Professor, supported by the Japanese Society for Promotion of Science (JSPS). He has authored and coauthored more than 170 papers in refereed journals, book chapters, and more than 200 international conference papers. His research interests include neuroprosthetics, rehabilitation robotics, motor control, and biomedical signal processing. He is a member of Institute of Electrical and Electronics Engineers (IEEE), International Society for Magnetic Resonance in Medicine (ISMRM), the Robot Society of Japan (RSJ) and the Japanese Society for Medical and Biological Engineering (JSMB).

Xinping Yu

Xinping Yu，Chief Physician, Doctor of Medicine, PhD Supervisor, Visiting Scholar at Ohio State University and Akron Children's Hospital, USA. Member of the Strabismus and Pediatric Ophthalmology Committee of the Chinese Medical Doctor Association, President of the Guangdong Optometric Association, Member of the Optometry and Amblyopia Committee of the Guangdong Medical Doctor Association, Deputy Chairman of the Visual Rehabilitation Committee of the Guangdong Precision Medicine Association. Corresponding Editorial Board Member of the "Chinese Journal of Optometry and Vision Science", Editorial Board Member of the "Asia-Pacific Journal of Ophthalmology", and Review Editor for "Frontiers in Neuroscience".

Yang Yu

Dr. Yang Yu received his Ph.D. degree in mechanical engineering from Shanghai Jiao Tong University, and now he is a doctoral research fellow in the Robotics Institute of Shanghai Jiao Tong University. His research interests include biomechatronic intelligent systems and neural interaction techniques. He has published more than 16 research articles in Nature Biomedical Engineering, IEEE TIE, IEEE JBHI, and IEEE TNSRE. In addition, he has been responsible for several national research projects, including Youth Project of National Natural Science Foundation of China, the Special Program of China Postdoctoral Science Foundation and its General Program. Moreover, he has also received the Shanghai Post-doctoral Excellence Program.

Amy Zavatsky

Amy Zavatsky has over thirty years' experience in the field of biomedical engineering, starting with an undergraduate degree in Bioengineering from the University of Pennsylvania, followed by a doctorate in Engineering Science from the University of Oxford. Zavatsky conducts research in the field of orthopaedic and musculoskeletal biomechanics, contributing mainly to the areas of joint and lower-limb mechanics and gait analysis. In collaboration with clinical and technical colleagues in the Gait Laboratory at Oxford's Nuffield Orthopaedic Centre, she has worked on the development of a multi-segment foot model for use in motion capture studies of gait. Now known as the Oxford Foot Model, it is used by clinical laboratories and biomechanics researchers worldwide. Another significant outcome of this collaboration has been the development of improved regression equations to estimate the position of the hip joint centre from bony landmarks on the pelvis for use in lower-limb gait models. Zavatsky's other research has added to our understanding of foot and ankle biomechanics, including flexible flatfoot in children; the kinematics of the human knee joint and its replacement; and the mechanical behaviour of the tendon. She was awarded a Philip Leverhulme Prize by the Leverhulme Trust (UK) in 2003.

Zavatsky has taught, supervised, and examined undergraduate and graduate students, with a focus on mechanical and civil engineering and biomechanics. She has been recognised for her excellence in teaching and her contributions to biomedical engineering education in Oxford through various teaching awards. She has been an external examiner for the undergraduate courses run by the Department of Bioengineering at Imperial College London and is currently a Council Member of the UK Association of Biomedical Engineers, Medical Engineers and Bioengineers (BioMedEng Association). Zavatsky served as Junior Proctor of the University of Oxford in 2012-13.

Dan Zhang

Professor Dan Zhang is a Chair Professor of Intelligent Robotics and Automation, and Director of Consortium for Intelligent Robotics Research at the Hong Kong Polytechnic University. He received his PhD in Mechanical Engineering from Laval University, Canada in 2000. He joined Ontario Tech University (OTU), Canada, as Assistant Professor in 2004 and was promoted to Associate Professor and Professor in 2006 and 2011 respectively. During the appointment period in OTU, he also served as Founding Chair in the Department of Automotive, Mechanical and Manufacturing Engineering (2012 – 2014) and was awarded the Canada Research Chair in Advanced Robotics and Automation (2009 – 2015). Since 2016, he transferred to York University, Canada as a Kaneff Professor and also took up the role of Department Chair in the Department of Mechanical Engineering from 2016 to 2018. Thereafter, he was awarded the Tier 1 York Research Chair in Advanced Robotics and Mechatronics in 2017.

Professor Zhang is a well-accomplished educator and an internationally renowned expert in the areas of parallel robotic machines and their applications in manufacturing systems. His influential scientific contributions have led to novel robotic system designs and development of new comprehensive models for better understanding of globe stiffness and robotic calibrations. His research applications have tackled some of the world's most challenging problems in high dynamic performance manufacturing robotic systems. His leadership has resulted in significant contributions to the areas of robotics, mechatronics, reconfigurable/sustainable manufacturing systems and MEMS devices. His accomplishments have been recognized by many honors and awards including Canada Research Chair, Research Excellence Awards, Tier 1 York Research Chair, Lassonde Innovation Awards --- Established Researcher, Early Researcher Award by Ministry of Research and Innovation, Fellow of the Canadian Academy of Engineering (CAE), Fellow of the Engineering Institute of Canada (EIC), Fellow of the American Society of Mechanical Engineers (ASME) and Fellow of the Canadian Society for Mechanical Engineering (CSME).

Professor Zhang has published 266 journal papers and 190 conference papers, 12 books, 9 book chapters and numerous other technical publications. Professor Zhang has served as a General Chair for 69 International Conferences and delivered 122 keynote speeches. Professor Zhang is listed as the World's Top Two Percent Researchers by Stanford's Standardized Citation Indicators in 2020, 2021, 2022 and 2023.

Dingguo Zhang

Dr Dingguo Zhang is a Reader in Robotics Engineering, the Director of Centre for Autonomous Robotics (CENTAUR), Department of Electronic & Electrical Engineering, University of Bath. His research interests include rehabilitation and assistive robotics, brain-computer interfaces and human-machine interfaces, biomechatronics and neuroprostheses. He serves as an Associate Editor for the IEEE Transactions on Neural Systems & Rehabilitation Engineering, IEEE Transactions on Medical Robotics and Bionics, IEEE Trans. Human-Machine Systems, Frontiers in Neuroscience and Frontiers in Neurorobotics. He is a senior member of IEEE (EMBS, RAS, SMC), and serves in three technical committees (BioRob, TST, BMI) of EMBS and SMC. He was a Board Member of International Society of Functional Electrical Stimulation (IFESS) and a Youth Commission Member of International Society of Bionic Engineering (ISBE). He attracted large grants from the National Natural Science Foundation of China (NSFC) and the Ministry of Science and Technology (MOST) when he worked in Shanghai Jiao Tong University. He has authored over 180 papers, and some were published in top biomedical and robotic journals. He was the winner of the Delsys Prize 2011, and a finalist of BCI Award 2015, 2020, and 2021. He got the First Prize of The State Scientific and Technological Progress Award 2023, and the Highest Prize of Shanghai Scientific and Technological Progress Award 2019.

Jun Zhang

Graduated from Nanjing University Medical College.
Once worked in the Department of Neurology at the General Hospital of Eastern Theater Command, with 10 years of clinical experience in neuro-physiology, including EMG, EEG, TCD, and PSG.
Formerly served as the product manager for the East China region and the marketing manager for the China region at Shanghai Bendi Company, with 22 years of experience in promoting and providing clinical support for clinical electrophysiological devices.
In 2020, he founded Wuhan Wuhan Apex Healthcare Technology Co., Ltd. and served as the company's CEO. Apex is the exclusive distributor throughout the whole of China in China for the EMG, EEG, Portable PSG of the American Cadwell company, the TMS of the Danish MagVenture company, and the transcranial Doppler products of the Israeli Viasonix company.

Lixin Zhang

PhD, Professor, Doctoral supervisor, Director of rehabilitation center. She currently holds positions in the following academic organizations:
Chairman of the Brain Function Testing and Regulation Rehabilitation Professional Committee of Liaoning Rehabilitation Medicine Association
Vice President of Rehabilitation Physicians Branch of Liaoning Medical Association
Executive Committee Member of the Physical Medicine and Rehabilitation Branch of Liaoning Medical Association
Vice Chairman of the Hyperbaric Oxygen and Emergency Rehabilitation Branch of Liaoning Medical Association
Member of the Neurorehabilitation Group of the Chinese Physical Medicine and Rehabilitation Branch
Vice Chairman of the Electrical Diagnosis Professional Committee of the Chinese Rehabilitation Medicine Association
Vice Chairman of the Brain Function Testing and Regulation Rehabilitation Professional Committee of the Chinese Rehabilitation Medicine Association
Secretary General of Liaoning Rehabilitation Medicine Association
Lixin Zhang has been engaged in rehabilitation medicine for more than 20 years, specializing in the rehabilitation of cerebrovascular disease, severe coma awakening, pediatric cerebral palsy, spinal cord injury, etc. Her research interest are the effects of physical agent and stem cell on cerebrovascular disease and spinal cord injury. She has already undertaken three national or provincial scientific projects, and participated in more than ten other national or provincial scientific projects. She won the third prize of Liaoning Provincial Science and Technology Progress Award in 2018. She participated in the writing of multiple rehabilitation textbooks and guidelines as an associate editor or editorial board member. She has published over 100 papers. She has trained over 50 doctoral and master's students in total.

Jianwei Zhang

Jianwei Zhang is Professor and Director of Technical Aspects of Multimodal Systems, Department of Informatics, University of Hamburg, Germany. He is Distinguished Visiting Professor of Tsinghua University. He is member of German Academy of Science and Engineering, International Member of Chinese Academy of Engineering, and member of Academy of Sciences and Humanities in Hamburg. He received both his Bachelor of Engineering (1986, with distinction) and Master of Engineering (1989) in the Department of Computer Science of Tsinghua University, his PhD (1994) in the Institute of Real-Time Computer Systems and Robotics of Department of Computer Science of University of Karlsruhe, Habilitation (2001, Artificial Intelligence and Robotics) of Technical Faculty of University of Bielefeld, and in 2002 became full-professor of Department of Informatics of University of Hamburg. Jianwei Zhang⊠s research interests include multimodal information (visual, auditory, tactile, etc.) processing, cognitive sensor fusion for robot perception, brain-inspired multimodal prediction, multimodal human-robot interaction, experience-based robot learning, bio-inspired modelling and learning of sensory-motor adaptive control, robot dexterous manipulation, human-like dynamically controlled robots, bi-manual robot assembly of 3D aggregates, and medical robot systems, etc. In these areas, he has published in total over 500 journal、conference papers and books, and received multiple best paper awards of numerous international conferences. He has led several EU、BMBF、DFG and industry-funded projects on robotics and cognitive systems. He is the Program Co-Chair of IEEE International Conference on Robotics and Automation ICRA2011, the General Chair of IEEE MFI (Multisensor Fusion and Integration) 2012, the General Chair of IEEE/RSJ International Conference on Intelligent Robots and Systems IROS 2015.

Longbin Zhang

Dr. Longbin Zhang is currently a research fellow at the Rehabilitation Research Institute of Singapore. She received her M.Sc. degree in Control Engineering from South China University of Technology in 2017, and her Ph.D. degree in Engineering Mechanics from KTH Royal Institute of Technology in 2021. Her doctoral studies focused on simulation-based exoskeleton design, personalizing individuals' muscle-tendon parameters, and developing data-driven models to predict joint torques using data from wearable sensors and machine learning. Her postdoctoral research has centered on quantitative fall risk assessment. Her research interests include the simulation of human movement, wearable exoskeleton assistive strategies, neuromuscular modeling, machine learning, and robot control strategies.

Mingming Zhang

Mingming Zhang received the Ph.D. degree in mechanical engineering from the University of Auckland, New Zealand, in 2016. From 2015 to 2018, I have been working as a research fellow and/or visiting research fellow in the University of Auckland. In August 2018, I joined the Department of Biomedical Engineering at the Southern University of Science and Technology (SUSTech) as an assistant professor and established the Brain-Robot Rehabilitation Technology Laboratory. Over the past a few years at SUSTech, my laboratory has been dedicated to advancing task-oriented robot-assisted rehabilitation technology, specifically focusing on enhancing the task execution capabilities of individuals with neurological injuries. Our research is centered around the deep integration of robotics and neural engineering, and we have achieved significant progress in the field of brain-robot hybrid rehabilitation technology. Up to now, I have authored over 90 academic papers. Notably, 27 of these articles have been published in IEEE Transactions or Journals, and five have been presented at prominent IEEE conferences such as ICRA and IROS. I have also received four awards, including three IEEE conference paper awards, such as the IEEE-ROBIO 2020-2021 T.J. Tran Best Paper Finalist in Robotics and the Best Potential Award at the 2019 World Robot Contest. I have contributed 14 academic reports at IEEE conferences, including a keynote talk at the 2021 IEEE RCAR. Due to my achievements in the field of rehabilitation robotics, I have been invited to serve as an Associate Editor of four high-quality journals in rehabilitation engineering or robotics, namely IEEE TNSRE, IEEE T-ASE, IEEE TMRB, and IEEE RA-L. Additionally, I have secured over ten research projects, including two grants from the National Natural Science Foundation of China and one from the Ministry of Science and Technology of China, where I serve as the principal investigator, amassing a total budget exceeding CNY 10,000,000.

Peihao Zhang

Engaged in the design and development of Chinese medicine diagnostic equipment and supporting artificial intelligence algorithms.

To enhance the performance of tongue and pulse acquisition devices in traditional Chinese medicine, He presided over the formulation of a comprehensive enterprise technical standard system, which includes standards for training data collection, training data quality, training data classification, annotator screening, guidelines and specifications for artificial intelligence model testing, requirements and testing standards for optical test environments, sensor detection standards, subjective comparison testing standards, and more.

Based on the above comprehensive technical standard system, the Chinese medicine diagnostic equipment developed by NAHEFA can ensure the consistency of detection data across different devices, batches, operating environments, and time points, meeting the needs of clinical practice and scientific research.

He participated in the writing of multiple enterprise patents and papers, as well as several clinical research projects.

Wenqiang Zhang

Dr. Zhang is a Professor of Fudan University, and Vice Dean of the Institute of Intelligent Robotics. Currently serving as the Deputy Director of the Intelligent Robotics Committee of the Chinese Computer Society and a Director of the Chinese Artificial Intelligence Society. His research interests are robotics, artificial intelligence, and intelligent equipment. In recent years, he has published over 200 papers (including top journals and conference papers such as TPAMI, CVPR, NeurIPS, AAAI, etc.). He has successively presided over the major projects of the Ministry of Science and Technology, the National Natural Science Foundation of China, and the Shanghai Municipal Science and Technology Commission's major science and technology projects. He has also developed seven generations of intelligent service robots, including the "Autonomous Mind Development Robot - Fudan I".

Ting Zhang

Prof. Zhang is a professor at the Robotics and Microsystem Research Center, Soochow University, Visiting Researcher at the Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Humanoid Robot Academician Workstation of the JiangHuai Frontier Technology Collaborative Innovation Center, and the founder and CTO of Suzhou Chundong Touch Robot Co., Ltd. He serves as an associate editor of the IEEE TASE, IEEE TMRB, and ICRA. He received his Ph.D. from the State Key Laboratory of Robotics and Systems of Harbin Institute of Technology under Prof. Liu Hong' s (Academician) supervision. He has worked at the Shenzhen Institute of Advanced Technology, and the Chinese Academy of Sciences, and engaged in postdoctoral research for 4 years at the University of North Carolina at Chapel Hill, United States. As the first/corresponding author, he has published over 50 papers and 2 cover articles in international journals and conferences such as IEEE/ASME TMECH, IEEE RAM, IEEE TASE, IEEE TNSRE, ICRA, IROS, etc. He has presided over the National Natural Science Foundation of China and the National Key R&D Program and won the first prize in the Guangdong Provincial Technological Invention Award, the "Jiangsu Provincial Distinguished Professor" Talent Program, and the United States NSF-Innovation Corps Program Award.

Wuxiang Zhang

Professor, director of the Robotics Research Institute of Beihang University. He serves as a member of the Robotics and Mechatronics Technical Committee of the International Federation of Institutes and Machine Sciences (IFToMM), a member of the Robotics Branch of the Chinese Mechanical Engineering Society, and an editorial board member of an international journal.He is committed to research related to intelligent robots, and has led more than 30 National Key Research & Development projects and National Natural Science Foundation of China projects. As the first/corresponding author, he has published more than 100 papers in well-known international journals and conferences in the fields of CST, Composites Part A, IJMS, MMT, IEEE T-IE, IEEE/ASME T-MECH, etc., and has been granted more than 60 invention patents and won many international academic conference paper awards.

Xiaoxu Zhang

Prof. Xiaoxu Zhang (PhD supervisor) received his B.Sc. degree in June 2009, his M.Sc. degree in June 2012 from Fudan University, and his Ph.D. in March 2017 from Tongji University. From May 2017 to May 2018, he conducted postdoctoral research at the University of Technology Sydney in Australia. Since November 2018, he has been employed at the Academy for Engineering and Technology, Fudan University, where he mainly conducts research on the modeling and identification of complex systems, as well as the design and control of intelligent prosthetics. In the past five years, he has hosted two projects from the National Natural Science Foundation of China, one project from the Shanghai Sailing Program, and one open fund from the National Key Laboratory of Robot Technology and Systems. As key personnel, he has participated in two National Key Research and Development Project of China and one key project from the National Natural Science Foundation of China. In the past five years, as the first/corresponding author, he has published more than 20 papers in high-impact journals such as the IEEE Transactions on Signal Processing, Nonlinear Dynamics, and the International Journal of Mechanical Sciences. He currently serves as the Executive Director of the Shanghai Society of Vibration Engineering, a Committee Member of the Modal Analysis and Testing of the Chinese Society for Vibration Engineering, a Committee Member of the Dynamics and Control of the Shanghai Society of Mechanics, and a Young Editor of the Journal of Dynamics and Control.

Xiaoyu Zhang

Male, professor, consultant of National Rehabilitation and Special Equipment Standardization Technical Committee for the Disabled（SAC/TC148）. He has served successively as deputy director of Hubei Province Prosthetic Limb Factory, vice president of China Prosthesis School, chief engineer of National Rehabilitation Assistive Equipment Research Center, vice president of China Association of Rehabilitation Assistive Devices, and vice chairman and secretary general of National Rehabilitation and Special Equipment Standardization Technical Committee for the Disabled（SAC/TC148）.

Yan Zhang

Dr. Yan Zhang is a research-driven innovator and entrepreneur. He has PhD in Smart Product Service Systems Innovation from the Blekinge Institute of Technology in Sweden. In 2016, he founded BIGmind, an innovation consulting company focusing on "Service Design". He was leading BIGmind to create 50 successful cases in Global. Zhang Yan is one of the first influential promotion and practice representatives in the field of service design in China, and one of the top ten outstanding young people in the service design industry in China. He has 11 years of service design experience in global innovation institutions, focusing on service innovation design. In the past 11 years, he has provided service innovation strategy consulting and design solutions for many international companies and domestic Internet companies and traditional companies such as Volvo, Carl Zeiss, Saab, Michelin, SAIC, Alibaba, Ant Financial, JD.com, and China Eastern Airlines. In 2022, Zhang Yan founded BIGSimulo Smart Simulation Innovation Platform, a technology startup company of product innovation simulation platform, with business distribution in Singapore, Shanghai and Sweden. The solution provides efficient and value-visualized product development and innovation services for global travel brands through the cutting-edge Digital Twin + 3D Simulation + Ai from the early product planning and R&D process.

Yuling Zhang

Dr.Yuling Zhang, MD and Ph.D., Postdoctoral in Spaulding Rehabilitation Hospital, the teaching affiliate of Harvard Medical School. Associate Researcher at Shanghai Engineering Research Center of Assistive Devices. Currently serving as the Secretary-General of Committee of Rehabilitation Engineering and Industry Development, Chinese Association of Rehabilitation Medicine and the Deputy Secretary-General of the professionnal Committee of Rehabilitation devices of China Rehabilitation Products Association. With over 10 years of research and teaching experience in the field of rehabilitation engineering and intelligent rehabilitation devices. She has led and taken part in the key projects supported by the National Key R&D Program of the Ministry of Science and Technology, China Disabled Persons' Federation, and the Shanghai Science and Technology Support Plan. She received the First Prize of Teaching Achievement of China Rehabilitation Medical Association. Her research primarily focuses on the intelligent evaluation and training prescription of rehabilitation robots, rehabilitation evaluation based on brain imaging technology,rehabilitation mechanism of brain injury etc. She has published more than 10 SCI-indexed papers and applied for over 30 patents in her field.

Zhan Zhang

Vice president of China Industrial Design Association, chairman of Shanghai Design City Promotion Center. Associate Director of the Shanghai University Art and Design Education Steering Committee, member of the Shanghai Economic and Information System Political Suggestion Expert Committee.

Di Zhao

Professor Zhao is a principal investigator at the Shanghai Mental Health Center (National Center for Mental Disorder). She served as Deputy Secretary General and Member of the Cognitive and Brain Modulation Branch of the Chinese Society for Cognitive Science, Executive Member of the Evidence Based Rehabilitation Branch of the Chinese Association for Drug Abuse Prevention and Control, Member of the Addiction and Brain Science Branch, and Youth Member of the Drug Dependence Toxicology Society of the Chinese Society for Toxicology. In recent years, She has been engaged in research on addiction and neuromodulation, and a series of works have been published in important journals such as Molecular Psychiatry, Science Advances, Nature Mental Health, and Cell Reports Medicine. At the same time, She has been awarded the Oriental Talent Program, and has led multiple national and provincial scientific research projects, including the National Natural Science Foundation General Program, the Shanghai Municipal Science and Technology Commission Youth Science and Technology Rising Star Program, and the Sailing Project. The research has won awards such as the Shanghai Medical Science and Technology Youth Award and the Yangtze River Delta Brain Science Youth Forum Clinical Neuroscience Innovation Award.

Liebin Zhao

Mr. Zhao is currently serving as the Deputy Secretary of the Party Committee of Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, Director of Shanghai Intelligent Pediatric Clinical Diagnosis and Treatment Technology Engineering Technology Research Center, Deputy Director of the Party Building Organization Research Institute of China Hospital Development Research Institute, and Deputy Director of the Hospital Culture Research Institute. Mr. Zhao is also serving as a member of the Medical Service Standards Special Committee of the National Health Commission, the Vice President of the Smart Hospital Branch of the China Medical Equipment Association, the Chairman of the Pediatric Clinical Norms and Guidelines Professional Group of the China Maternal and Child Health Association, the Expert in Quality Award Evaluation of the Shanghai Municipal Government, the Director of the Shanghai Medical Association, the Vice Chairman of the Medical Artificial Intelligence Management Special Committee of the Shanghai Hospital Association, and the Leader of the Clinical Application and Evaluation Group of Artificial Intelligence Technology. Mr. Zhao has published nearly 150 papers in academic journals both domestically and internationally, including over 20 SCI papers, authored 6 monographs, obtained 8 national patents and 2 national software copyrights, and undertaken and completed over 20 projects at various levels.

Jie Zhao

Zhao Jie is the Director of the Robotics Institute at Harbin Institute of Technology and a recipient of a prestigious national award for talent. He has served as the Chairman of the Expert Group for Intelligent Robotics within the Advanced Manufacturing Sector of China's National High-Tech Research and Development Plan and as the Chairman of the Expert Group within the National Key R&D Program. He is also a member of the Intelligent Manufacturing Expert Committee and the National Strategy Consulting Committee for Manufacturing Power Construction, Vice President of the China Mechatronics Technology Application Association, and holds several other significant roles

Xinggang Zhao

Xinggang Zhao is a specially-appointed core researcher at the Chinese Academy of Sciences (CAS), serving as a doctoral supervisor and the director of the Robotics Research Laboratory. He also concurrently holds the position of director at the Liaoning Provincial Key Laboratory of Collaborative Robots and Medical Equipment. He has been selected as an outstanding member of the Youth Innovation Promotion Association of CAS, is young scholars for regional development at CAS, and leads an innovation and entrepreneurship team under the "Xingliao Yingcai" program in Liaoning Province. His primary research areas encompass medical rehabilitation robots, behavior-assistive robots, and intelligent human-robot interaction technologies. To date, he has published over 200 academic papers and filed more than 40 patent applications. As the principal investigator, he has presided over more than 20 research projects, including key projects under the National Key Research and Development Program and joint fund projects of the National Natural Science Foundation of China (NSFC). He has been awarded one First Prize for Technological Invention by the Chinese Association of Automation (CAA) and two First Prizes for Academic Achievements in Natural Sciences by Liaoning Province.

Enhao Zheng

Enhao Zheng is an Associate Professor at the Institute of Automation, Chinese Academy of Sciences, specializing in wearable human-machine interfaces, robot motion control, and embodied intelligence. He has published over 30 papers in related fields, including in top journals and flagship conferences in robotics, such as IEEE/ASME T-MECH, IEEE TNSRE, IEEE TBME, IEEE RA-L, IEEE ICRA, and IEEE IROS. He has also obtained several national invention patents and US patent authorizations. His research achievements have received recognition, including the award for "neural prosthesis" innovative technology at a contest and the Best Paper Award from IEEE CBS. As the principal investigator and independent project leader, he has undertaken numerous national and local key research tasks, including key projects from the National Natural Science Foundation of China, the National Key R&D Program of China, the CIE-Tencent special project, and the frontier project of the Beijing Natural Science Foundation-Haidian Joint Fund. He serves as a reviewer for journals such as IEEE TRO, IEEE/ASME T-MECH, IEEE TNSRE, IEEE TBME, and IEEE RA-L. He has been selected as a member of the Chinese Academy of Sciences "Youth Innovation Promotion Association" and a special researcher project of Chinese Academy of Sciences.

Jiejiao Zheng

Chief Physician, Professor, Supervisor of Master's and PhD Students, Executive Director of the Chinese Society of Rehabilitation Medicine, Deputy Director of the Standard Rehabilitation Committee of the Chinese Society of Rehabilitation Medicine, Shanghai Medical Craftsman, Vice President of the Shanghai Rehabilitation Medical Engineering Research Association, Executive Director of the Shanghai Clinical Medical Research Center of Rehabilitation Medicine; Director of the Shanghai Rehabilitation Treatment Quality Control Center; President of the Shanghai Society of Rehabilitation Medicine, and Chairman of the Rehabilitation Special Committee of the Shanghai Standardization Association. In 1989, the first cohort of rehabilitation specialists in China trained under the WHO Ten-Year Thousand Talents Plan.

Overseeing more than 30 research projects funded at national, provincial, and other levels. As first or corresponding author, published over 200 professional research papers, including 17 SCI-indexed papers with a cumulative impact factor exceeding 80. In recent years, led the formulation and release of over 40 rehabilitation group standards such as "Basic Requirements for Fall Prevention Rehabilitation Intervention in the Elderly" and "Requirements for Subspecialty Subjects in Rehabilitation Medicine," and participated in the development of one national standard. Chief editor of the People's Medical Publishing House's "Geriatric Rehabilitation" in the 13th Five-Year Plan series and over 20 other works in the Rehabilitation Series, including "Guidelines for Rehabilitation of Geriatric Diseases."

Qian Zhang

Board Secretary and Marketing Director of Shanghai Golden Arrow Robot Technology Co., LTD Director of production-education Integration Department, Rapid Manufacturing Center of Shanghai University Former Deputy Director of the Office of the Medical Equipment Development and Promotion Working Committee of China Medical Education Association Member of intelligent Medical Industry and Industry Research Promotion Branch of Jiangsu Rehabilitation Medical Specialty Alliance Health manager A TCM rehabilitation physical therapist Good at data processing and statistics, focusing on intelligent rehabilitation robot, medical and integration of production and education.

Pengyuan Zheng

Professor, Professor of medicine, Doctor of Medicine, doctoral supervisor. Visiting scholar of Vrije Universiteit Amsterdam, the Netherlands; PhD from the National University of Singapore; postdoctoral fellow of University of Toronto, Canada. Director of the Institute of Rehabilitation Medicine of Henan Academy of Medical Sciences; president of Zhengzhou University Medical and health care industry college. Enjoy the special allowance experts of The State Council, national candidates of the "Millions of Talents Project" of the Ministry of Personnel, high-level talents of Henan Province, leading talents of the "Central Plains Thousand Talents Plan" and famous doctors of the Central Plains. Chief expert of the National Key Research and Development Plan (combination of medical and nursing Care) of the Ministry of Science and Technology. Chairman of the health care Working Committee of the Chinese Rehabilitation Medical Association, deputy chairman of the Microecology Branch of the Chinese Preventive Medical Association, Director of the Scientific and Technological response Research Center of Active health and aging in Henan Province, director of the quality Control center of the combination of medical and nursing care in Henan Province, and chairman of the special committee of the combination of medical and nursing care in Henan Province. National key research and development plan project - medical and nursing combined service model and standardized application demonstration project leader, presided over 5 National Natural Science Foundation projects, 973 early fund, "12th Five-Year" science and technology support plan fund. More than 200 academic articles have been published, and SCI papers more than 110.

Dawei Zhou

Associate Professor at the Rehabilitation Engineering of Beijing College of Society Administrator, Level 1 Senior Prosthetic Engineer, Level 2 Orthopedic Engineer, Level 3 Auxiliary Engineer, and National Registered Orthopedic Maker. Outstanding Young Backbone Teachers of Vocational Colleges in Beijing in 2018. Bachelor's degree in Computer Software from Peking University, a Bachelor's degree in Biomedical Engineering from Capital Medical University, and a Master's degree in Control Engineering in Electrical Automation from Beihang University. Undertake multiple core courses in prosthetics and orthotics. I have been engaged in the professional education of prosthetics and orthotics for 22 years, publishing more than 10 papers, and participating in professional textbooks such as "Thigh Prosthetic Assembly", "Lower Leg Prosthetic Assembly", "Spinal Orthopedic Assembly", "Lower Limb Orthopedic Assembly", "Foot Orthopedic Design and Manufacturing", "Rehabilitation Engineering Technology", "Principles and Applications of Prosthetic Orthopedic Components", etc. I have also participated in the development of professional textbooks for prosthetic and orthotic device identification at the Vocational Skills Appraisal Guidance Center of the Ministry of Civil Affairs, such as "Prosthets", "Orthopedic Teachers", "Prosthetic Assembly Workers (Basic Knowledge)", "Prosthetic Assembly Workers (Level 5, 4, and 3)", and "Prosthetic Assembly Workers (Level 1)". Editor in Chief. We have successively installed and trained computer-aided design systems for prosthetics and orthotics in more than ten state-owned rehabilitation accessory centers, including Beijing, Yunnan, Sichuan, Guangxi, Shanghai, Xinjiang, Shanxi, Gansu, etc. We have been engaged in 3D printing design and manufacturing of rehabilitation aids for a long time.

Lanshu Zhou

Professor of Navy Medical University& Dean of the School of Nursing, Shanghai University of Traditional Chinese Medicine
The convenor of the 8th Nursing Discipline Appraisal Group of the Academic Degrees Committee of The State Council
Dean of Key Laboratory of Geriatric Long-term Care（Naval Medical University），Ministry of Education
Chairperson of Shanghai Nursing & Health Technology Professional Committee;
Editor-in-Chief of Nursing Journal of Chinese People's Liberation Army
Hosted 17 international cooperation projects, national social science projects, and Ministry of Education industry university research cooperation projects, with a budget of nearly 3 million yuan. Won the second prize of Shanghai Science and Technology Progress Award, the second prize of Rehabilitation Science and Technology Progress Award, and the National Nursing Science and Technology Progress Award as the first author. Applied for 12 patents and published more than 250 articles.

Mouwang Zhou

Professor , Peking University
Director, Department of Rehabilitation Medicine, Peking University, doctoral supervisor.
Director, National Rehabilitation Medicine Quality Control Center;
President of Rehabilitation Physician Branch, Chinese Medical Doctor Association;
Chairman designate, Chinese Medical Association Physical Medicine and Rehabilitation Society;
Member of the Standing Committee of China Medical Promotion Association;
Deputy editor of Chinese Journal of Rehabilitation Medicine;
Deputy editor-in-chief of Chinese Journal of Physical Medicine and Rehabilitation
Member, Clinical Science and Research Committee (CS&RC), International Society of Physical Medicine and Rehabilitation (ISPRM).

Chi Zhu

Prof. Chi Zhu received his Ph.D. from the University of Tokyo, Japan, in 1999. He was a researcher at NIRE (National Institute for Resource and Environment, Japan) and Yokohama National University in 1999 and 2000, respectively. From 2001 to 2002, he was a post-doctoral associate at Massachusetts Institute of Technology, USA. Then he worked as assistant professor with the Department of Electrical and Computer Engineering at Yokohama National University, Japan from 2002 to 2007. He was an associate professor and full Professor respectively with Dept. of Systems Life Engineering at Maebashi institute of Technology, Japan, from 2007 to 2023. Prof. Zhu is currently a Chair Professor at Shenzhen Technology University. Prof. Zhu's research interests include humanoid robots, mobile robots, human-centred robots as assistive and rehabilitation robots, wearable power-assist exoskeleton, neuro-robotics.

Rui Zhu

Associate Professor and Doctoral Supervisor at Tongji University, PhD from Charlotte Medical University in Germany. Prof. Zhu is currently serving as the Director of the Assistive Resources Department at Tongji University Affiliated Rehabilitation Hospital, Deputy Director of the Key Laboratory of Intelligent Rehabilitation Assistive Devices and Technology of Shanghai Disabled Persons' Federation, Chairman of the Rehabilitation Assistive Devices Professional Committee of Shanghai Disabled Persons' Rehabilitation Association, and Standing Committee Member of the Rehabilitation Engineering and Assistive Technology Special Committee of China Disabled Persons' Rehabilitation Association, etc. Prof. Zhu is also the Project Leader of National Key Research and Development Program, Outstanding Young Medical Talent of Shanghai Health and Family Planning System. Focusing on biomechanical research and translational medicine research related to rehabilitation engineering and orthopedics, Prof. Zhu has led 1 national key research and development program project and 1 sub project, as well as 2 National Natural Science Foundation projects, with a total research funding of nearly ten million RMB. Prof. Zhu has published over 50 papers, including 26 SCI papers as the first author/corresponding author, applied for a total of 25 patents, of which 17 were authorized, and he participated in the development of 2 group standards for the China Medical Device Industry Association, edited 2 monographs, and translated 1 monograph.

Yan Zhu

Yan Zhu, chief physician of rehabilitation Medicine, adjunct professor of Shanghai University of Traditional Chinese Medicine, Executive director of Neurorehabilitation Department of Shanghai Second Rehabilitation Hospital, and special talents need to be introduced by Baoshan District Health and Family Planning Commission.

Executive Director of Shanghai Rehabilitation Medical Association, Standing Committee Member of Neurorehabilitation Special Committee of Shanghai Rehabilitation Medical Association, has been responsible for more than 10 scientific research projects of Shanghai Science and Technology Commission, Shanghai Sports Bureau, Shanghai Health Bureau, published 4 SCI papers, more than 30 academic papers, participated in the compilation of 9 textbooks and academic monographs, and 3 invention patents. He is good at developing comprehensive rehabilitation strategies for stroke, spinal cord injury, Parkinson's disease and other diseases. He won 3 third prizes of Shanghai Rehabilitation Medicine Science and Technology Award, the title of Excellent rehabilitation physician of China Rehabilitation Medical Association, and the title of excellent discipline leader of Shanghai Rehabilitation Medical Association and Baoshan District Health Committee.

Yulian Zhu

Doctor of Sports Human Science,serves as Chief Rehabilitation Therapist, Professor and Doctoral advisor,Vice President of Pudong Hospital and Vice Director of Rehabilitation Medicine Department Huashan Hospital Affiliated to Fudan University,Chairman-designate of Chinese Physical Therapy Association and Head of Critical Physical Therapy Group,Standing Committee of Science and Technology Assessment and Management Committee/Organ Transplantation Committee of Chinese Association of Rehabilitation Medicine(CARM),Member and Secretary-General of Physical Medicine and Rehabilitation Committee of Shanghai Medical Association.Mainly engaged in the rehabilitation evaluation and treatment of motor dysfunction after sports injury, stroke and brain trauma, Parkinson's disease and age-related degenerative diseases, and new technology clinical research.She has won more than 10 awards, including the first prize of the Science and Technology Award of CARM,the second prize of the Shanghai Science and Technology Progress Award, the Shanghai Medical Science Achievement Promotion Award and the Shanghai Science Popularization Education Innovation Award,and has published nearly 100 papers, including 16 SCI papers by the first author and the corresponding author. She has edited or deputy edited 5 professional books and participated in the compilation of more than 10 textbooks.

Zhihui Qian

Zhihui Qian is a full professor of Bionic Science and Engineering at Jilin University (JLU). He is the co-head of research team of Biorobotics and Healthcare Engineering, Deputy Director of key laboratory of Bionic Engineering (Ministry of education), Deputy Director of key laboratory of Bionic Engineering of Jilin Province, P.R. China.

Over the past decades, he has dedicated himself to biomechanics and biorobotics research by exploring the underlying working principles of the human musculoskeletal system, whilst developing bioinspired healthcare robotics and devices based on the learnt biological principles. He has been the PI of over 20 research projects funded by National Science Foundation of China (NSFC), Ministry of Science and Technology of China (MSTC) etc., has over 100 peer-reviewed journal papers published in leading journals (Progress in Materials Science, Advanced Functional Materials, Advance Science, Annals of Biomedical Engineering etc.), and has been awarded over 60 patents. His research works have been widely cited by researchers in the fields of biomechanical engineering and bionic science and engineering, including many world-leading scientists. He has been awarded several prizes in bionic science and engineering including 1st Prize for Technological Invention of the Ministry of Education, 1st Prize of the Provincial Innovation in Technology Award, 1st Prize of the International Rehabilitation Medicine Innovation Award etc. He has been invited to give keynote and invited speeches, act as conference chairs, academic and technical committee members of over 20 highly esteemed international conferences.

gSIC Judges

Prof. Duojin Wang, University of Shanghai for Science and Technology

Prof. Wujing Cao, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China

Prof. Kenneth Fong, The Hong Kong Polytechnic University

Dr. Sarun Sumriddetchkajorn, National Science and Technology Development Agency(NSTDA)

Dr. Leigang Zhang, University of Shanghai for Science and Technology, China

Dr. Ta-Chieh (Jerry) HSU, Taiwan Rehabilitation Engineering and Assistive Technology Society, Taiwan, China

Prof. Yuichiro Honda, Osaka Sangyo University, Japan

Dr. Piyawut Srichaikul, National Science and Technology Development Agency, Thailand

Dr. Dengwei Ma, Sunnyou Medical, China

Team ID	Title of the Project	Institution
D01	Enhance multi-terrain walking ability of lower limb amputees: a novel sensor fusion powered transfemoral prosthesis	South University of Science and Technology of China
D02	Cantastic Pal(m)	The Hong Kong Polytechnic University
D03	ANTI-SPILL TRAY	Institute of Technical Educatiom
D04	A Soft Prosthesis with Myoelectric Interface for Computer Mouse Operations	Wuhan University of Science and Technology
D05	A Self-Aligning Knee Exoskeleton with Hip Rotation Capability	University of Chinese Academy of Sciences
D06	štoi -Bone Manager	National Cheng Kung University
D07	lower limb rehabilitation exoskeleton for children with cerebral palsy	Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences China University of Petroleum (East China)
D08	HoverCane: A Motorized Self-Balancing Walking Companion for Independent Living	The Hague University of Applied Sciences
D09	Sit Healthy - Intelligent detection of abnormal sitting posture interactive chair	Shanghai University of Medicine & Health Sciences
D10	A Lightweight Lower Limb Exoskeleton With Compliant Knee Joints	Wuhan University
D11	A rehabilitation elbow robot with variable stiffness using human-robot interaction control	North University of China
D12	The invention relates to a digital intelligent anti-shake water cup based on the application of the PTZ anti-shake technology	Shantou University
D13	MobiDyno: Mobile Lower Limb Biomechanical Data Acquisition System	South University of Science and Technology

Team ID	Title of the Project	Institution
D14	Intelligent Ankle Rehabilitation Robot	Shanghai University of Medicine & Health Sciences
D15	Seated Pants-Wearer	Guangzhou Medical University
D16	PneumGo: The intelligent modular pneumatic control system for soft-robot-rehabilitation	University of Oxford
D17	The Pneumatic Soft wrist-hand Exoskeleton Rehabilitation Assistive Robotic System	University of Shanghai for Science and Technology
D18	ONE-HAND-CLIP	The Hong Kong Polytechnic University
D19	No Barrier to Love- A Virtual Simulation System for Assessment and Training of Activities of Daily Living and Environmental Modifications Based on the PEO Model	Fujian Medical University
D20	A table tennis robot for community oriented early screening and rehabilitation of Parkinson's patients	Shanghai University of Traditional Chinese Medicine
D21	Intelligent assessment of adolescent scoliosis - correction - rehabilitation training promoter	Beijing Vocational College of Social Management
D22	FlexiHand - An assistive prosthetic device supporting individuals with limited functionality or weakness in their dominant hand	The Hong Kong Polytechnic University
D23	Loong Nail Cutter	Tung Wah College
D24	Skin Impedance Based Chinese Medicine Holographic Acupoint Electrical Stimulator	The First Affiliated Hospital of Naval Medical University / University of Shanghai for Science and Technology
D25	DDC	Ming Chi University of Technology
D26	TongueFlex Pro	National Taipei University of Education
D27	Flying Ear Pressure Regulator	TunHai University

Team ID	Title of the Project	Institution
D28	Happy CP Gloves: Smiling Solutions for children with cerebral palsy	Chulalongkorn University Demonstration School
D29	Keeb Healthy	Rajini School
D30	Design of forearm prosthetic socket system based on 3D reconstruction	University of Shanghai for Science and Technology
D31	STRAW SPLINT	Montfort College
D32	Braille's Film	Patumwan Demonstration School
D33	BART LAB Intelligent Robotic Stair Climbing Wheelchair	Mahidol University

Team ID	Title of the Project	Institution
T01	Assisted Learning Device by Institute of Technical Education (ALDITE)	Institute of Technical Education
T02	A device and smartphone application of visual-auditory stimulation	Shanghai University of Traditional Chinese Medicine
T03	Piano hand exoskeleton teaching assistant	University of Bath
T04	A dexterous prosthetic hand for force tactile sensing and feedback based on arrayed electromyographic images	Southeast University
T05	Smart Cane for Visually Impaired Individuals Based on Walk Path Generation (WPG) and Intelligent Perception.	Nanjing University of Science and Technology
T06	A Multimodal Knee Exoskeleton for Fracture Rehabilitation	Xi'an Jiaotong University
T07	Bionic intelligent knee-ankle integrated lower limb prosthesis.	Jilin University
T08	Event Sound Reminder Assistive system (ESRA)	Chung Yuan Christian University
T09	Silver Shield (Fall Detection)	Temasek Polytechnic
T10	HydroSense: An Individualized and Environment-Responsive Intelligent Cupholder with IoT for Dehydration Prevention	The Hong Kong Polytechnic University
T11	Lost Elderly Finder App {Memory Find}	Temasek Polytechnic
T12	A Hip Joint Exoskeleton Robot for the Complete Rehabilitation Process of Hemiplegic Patients	Zhejiang University University of Nottingham Ningbo China
T13	NAVI (Navigational Assistance for the Visually Impaired)	Temasek Polytechnic
T14	Self-balancing lower limb exoskeleton: AutoLEE-G3	University of Chinese Academy of Sciences

Team ID	Title of the Project	Institution
T15	Smart Spasticity Management System	Chang Gung University
T16	Design of a Soft Lower-Limb Augmentation Exoskeleton for Enhancing Daily Mobility in Individuals with Weak Walking Abilities	South University of Science and Technology of China
T17	Radicare - Wearable Neuromuscular Functional Electrical Stimulation Smart Rehabilitation Device	Shantou University
T18	Virtual-reality Multisensory Coordinated Task-Oriented Mirror Therapy	National Cheng Kung University
T19	Neuromuscular electrical stimulation rehabilitation vest	University of Shanghai for Science and Technology The First Affiliated Hospital of Naval Medical University
T20	SmartExoPlay: An Intelligent Exoskeleton Rehabilitation Game Enhanced with FES Haptic Feedback	Sun Yat-sen University
T21	AR/VR-enabled omnidirectional mobile end-effector home-based lower- and upper-limb rehabilitation machine	National Chung Hsing University
T22	A Wearable, Multi-Channel, Parameter-Adjustable Functional Electrical Stimulation System for Controlling Individual Finger Movements	University of Bath
T23	The effect of a novel lower-limb flexible exoskeleton for reconstructing walking function in an early-phase stroke patient: a case report	Tongji University
T24	Safe Grasping Strategies for Dexterous Hands Based on Bio-Inspired Tactile Sensors	Soochow University

Team ID	Title of the Project	Institution
T25	Walking aid robot based on plantar pressure and electromagnetic localization	University of Chinese Academy of Sciences
T26	Stiffness Estimation of Finger Joints with Joint Modular Soft Actuators	Chiba University
T27	Hip Exoskeleton Rehabilitation and Intelligent Evaluation System for Gait Disabilities	Macau University of Science and Technology China University of Mining & Technology, Beijing
T28	CAREmate Robot	Bangkok Christian College
T29	Knee Ease: A Bionic Massage Device Inspired by the seating knee-adjustment manipulation	University of Shanghai for Science and Technology
T30	ALL Wheelchair: AI Motion Tracking System for Monitoring Health and Activity	Faculty of Allied Health Sciences
T31	Multi-functional Integrated Nursing Wheelchair	University of Shanghai for Science and Technology
T32	ClearConverse: A Web Application for Enhanced Communication for People with Alaryngeal Speech	King Mongkut's University of Technology Thonburi
T33	Beyond Reality Rehabilitation: A Novel Soft Exoskeleton Robot with AI Digital Human for Upper-limb Dyfunction	University of Shanghai for Science and Technology
T34	Crossing Vision	The Prince Royal's College
T35	Vision-aided Intelligent Bathing Robot System	University of Shanghai for Science and Technology
T36	THE LIFT AND WALK	Thammasat University
T37	WELE Intelligent Wearable Lumbar Exoskeleton	University of Shanghai for Science and Technology
T38	Ankle Remote Rehabilitation Robot	University of Shanghai for Science and Technology
T39	Synchronized Proportional Control Training System for Myoelectric Prostheses	University of Shanghai for Science and Technology

GRREC Judges

Prof. Qingmei Wang, Spaulding Rehabilitation Hospital, Affiliated with Harvard Medical School

Prof. Qing Du, Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medicine

Prof. Jie Jia, Huashan Hospital affiliated to Fudan University

Prof. Shengquan Xie, University of Leeds

Prof. Bingshan Hu, University of Shanghai for Science and Technology

Mr. Wuqing Yang, Shanghai Golden Arrow Robot Technology Co.,Ltd

Prof. Mei Shuai, Beijing AI-robotics Technology Co.,Ltd

ApplicationA01	Intelligent Nursing Robot	Zhifeng Peng
ApplicationA02	BCI Rehabilitation System	Wudong Wang
ApplicationA03	Mobile Lower Limb Rehabilitation Robot	Jian Li
ApplicationA04	Future Medical Pioneer: NeuroLink Brain Computer Interface Robot	Zonghan Li
ApplicationA05	Horizontal Lower Limbs Rehabilitative Robot	Jian Li, Peng Liang
ApplicationA06	XR-Driven Haptic Feedback and Intelligent Trajectory Adaptive Upper Limb Rehabilitation Robot	Yu Wang
ApplicationA07	Passively powered exoskeleton in lower limb rehabilitation after stroke	Jerry Wu
ApplicationA08	Efficacy verification and mechanism observation of an intelligent massage robot based on finite element analysis in patients with non-specific low back pain	Qilong Hu, Wenxin Niu
ApplicationA09	Multi modal interactive emotional companion robot	Xiangyu Sun
ApplicationA10	Rigid-Flexible Coupling Micro-Source Lower Limb Assistive Exoskeleton	Long He
ApplicationA11	Hybrid Active-Passive Driven Flexible Lower Limb Exoskeleton	Qiaoling Meng
ApplicationA12	Vision Technology	Yuzhen Yang
ApplicationA13	Integrated Smart Bed-Chair Robot	Zijian Ding
ApplicationA14	Supervising teachers Chatbot for tinnitus rehabilitation	Ting Li
ApplicationA15	3D Intelligent Markerless Assessment System for Precision Rehabilitation	Ang Wei Tech
TechnologyT01	Serialized compliant robots for stroke rehabilitation	Haoyong Yu
TechnologyT02	REX Self-balancing Bionic Lower Extremity Exoskeleton Rehabilitation Robot	Fengdong Miao
TechnologyT03	ZEPU-AI9 Exoskeleton Rehabilitation Robot	Changlin Wu
TechnologyT04	TechnologyT04: Honeycomb Pneumatic Hand Rehabilitation Robot with Multimodal Strategies	Wu Peiyang
TechnologyT05	Clever and ingenious hands - intelligent finger wrist rehabilitation robot	Desheng Zheng
TechnologyT06	Functional electrical stimulation intelligent rehabilitation robot	Dapeng Zhang
TechnologyT07	Desktop upper limb rehabilitation training and assessment system	Li Ye

TechnologyT08	MR Healing	Ming Gong
TechnologyT09	Joint isokinetic training and testing system	Huajun Yu
TechnologyT10:	TechnologyT10: Brain controlled intelligent rehabilitation robot based on interventional brain computer interface	Wenzhi Wang
TechnologyT11:	TechnologyT11: Brain machine single lower limb exoskeleton intelligent neural rehabilitation robot	Luya Li
TechnologyT12	Wheelchair-Exoskeleton Hybrid Robot for Lower Limb Rehabilitation and Movement Assistance	Zhibin Song
TechnologyT13	A Rehabilitation Physiotherapy Robot Based on the Intelligent Traditional Chinese Medicine (TCM) Expert System	Youquan Wang
TechnologyT14	FutureWalk, A new smart lower limb exoskeleton for children	Hongliu Yu
TechnologyT15	Home multi-function waist massager	Xiaotian Liang
TechnologyT16	A Chinese medicine massage product for foot drop	Lanyu Zhang
TechnologyT17	Universal Parallel Lumbar Exoskeleton	Chengcheng Liu
TechnologyT18	Adaptive Closed-Loop Functional Electrical Stimulation System with Visual Feedback for Enhanced Grasping in Neurological Impairments	Chengyu Lin
TechnologyT19	SMA-driven Finger Exoskeleton Design and Multimodal Fusion Mechanism Study	Yindi Wang
TechnologyT20	FormFit H --- Orthopedic helmet	Xu Bihua
TechnologyT21	Scoliosis rehabilitation robot	Bngde Wang
TechnologyT22	Research on High Fusion Exoskeleton Robot System for Upper Limb Fine Rehabilitation	Ran Jiao
TechnologyT23	Knee Ease: A Bionic Massage Device Inspired by the seating knee-adjustment manipulation	Yichun Shen
TechnologyT24	Enhancing Patients' Autonomous Exercise Habits: A Flexible Multi-Joint Synergistic Rehabilitation Assistive Robot for Upper Limbs	Shuheng Ren
TechnologyT25	Design and Application of Hand Passive Motion Instrument Based on Hemiplegic Patients	Wu Xin
TechnologyT26	Towards a new life: a wearable active rehabilitation assistance system for the hand based on neural intent decoding technology	Daohui Zhang
TechnologyT27	Rigid-flexible coupled trunk rehabilitation robot	Shanshan Li

i-CREATe006	Emotional EEG Prediction Based on Spatial-Temporal Graph Convolutional Neural Network
	Bi, Jinying* Wang, Fei Qu, Gangguo Hu, Fangzhou Li, Hao Han, Shuai
i-CREATe009	A Prediction Model of Continuous Lower Limb Motion Based on FOX Optimized LSTM
	Zhao, Ziwei* Tao, Qing
i-CREATe011	A Comprehensive Assessment of Lower Limb Muscle Fatigue through Fusion of sEMG and VMG Signals
	Pan, Heng* Wang, Can Song, Xiaoyu Wu, Xinyu
i-CREATe014	Development of a Bionic Massage Robot Based on the Seating Knee-Adjustment Manipulation
	Shen, Yichun* Wang, Shuyi Shen, Yuhan Xing, Hua Gong, Li Wang, Xue
i-CREATe018	Terrain Detection for Lower Limb Prostheses Using Depth Camera Assistance
	Liao, Wenxiang*
i-CREATe022	A Docking Control Method for a Split Nursing Bed
	Pang, Zhi* Hu, Bingshan
i-CREATe036	Curriculum and Implications of German Mechanical Engineering Undergraduate Education for Human Factors Engineering Courses in Rehabilitation Engineering Program
	Wang, Duojin*
i-CREATe058	Design of a Rigid-flexible Hybrid Bionic Lower Limb Robot
	Bao, Xin* Wang, Keyi Huang, Yuehua Li, Min Li, Jinghang
i-CREATe059	Analysis of the Corrective Effects of 3D Printed Orthotic Insoles on Mild Compensatory Scoliosis
	Huang, Yanbo y*
i-CREATe065	Study on the Effect of Load Exercise on Heart Rate Variability Indexes of College Students with Different Constitutions
	Tan, Shulian S*
i-CREATe068	The Sensitivity of Wearable Sensor on Fall Risk Prediction for Community-dwelling Older People in Hong Kong: A Proposective Cohort Study
	Lai, Ka Ming* Fong, Kenneth

i-CREATe069	Spontaneous Cortical Activity Alterations Induced by Tui Na in Post-stroke Patients: A Pilot Resting-state fNIRS Study
	Mao, Mengchai* Chen, Yufeng Zhu, Guangyue Fang, Lei Chen, Siyun Hua, Xuyun Shan, Chunlei Shi, Xiaolong Gao, Hang Xu, Dongsheng
i-CREATe071	Efficacy and Safety Assessment of Custom 3D-Printed Cervical Pillows for the Treatment of Mechanical Cervical Spondylosis Based on Finite Element Analysis
	Wu, Yuncheng* Yang, Yunxiao Ren, Fuchao Li, Ya Wang, Jinwu Cheng, Yunzhang
i-CREATe080	Validation of Customized Functional Insoles for The Very Elderly with Complex Foot Conditions
	Zhang, Kexin* Duan, Yijie Xu, Yan Pu, Fang Ren, Weiyan
i-CREATe088	A CNN-Transformer Hybrid Network for Hand Gesture Classification Based on High-Density sEMG
	Chen, Mengya* Hou, Zengguang Li, Zeyi Yang, Hongjun
i-CREATe089	Continuous Prediction of Hand Joint Angles Based on sEMG and Tf-LSTM
	Yang, Zhenning* Tao, Qing Su, Na
i-CREATe090	Research on EEG Signal Classification Method Based on Brain-computer Interface Control of Rehabilitation Robot
	Zhang, Yiwen Wang, Wenzhi Liu, Gan Qiao, Yi Shi, Ruochuan Duan, Yahan Du, Ying Li, Sining Guo, Fengrui Duan, Feng* McHugh, Thomas John
i-CREATe102	An Intelligent Signage Color Configuration Workflow Base on Universal Design
	Zhang, Erke Zhao, Wei* Wu, Yu CHEN, FEI Xia, Yuanyuan
i-CREATe106	A Motor Imagery Transfer Learning Approach Based on Riemannian Alignment and Distance Preservation to Local Mean
	Qin, Ke* Qu, Tingnan Li, Shurui Jin, Jing
i-CREATe111	Facial Expression Recognition and Integration with External Devices: A Computer Vision-Based Alternative Approach to Empower Individuals with Physical Impairments in Restoring Access and Control
	Tsoi, Kim Ming Yu, King-Pong* Chan, Ka-Leung Yeung, Tsz-Yan Ma, Wai-Ling
i-CREATe112	Enhanced Feature Extraction with Superlet Transformation for EEG Emotion Classification
	Guan, Qiyu* Zou, Luyao Hao, Zhipeng Li, Jun Qian, Xiaoying Zhang, Lixia Zhou, Hui

i-CREATe113	Reinforcement Learning-based Human Kinetics Estimation from Kinematics
	Wang, Kuan* Shao, Jiang Chen, Xinpeng
i-CREATe114	A Multimodal Knee Exoskeleton for Fracture Rehabilitation
	Kong, Xiangrui Li, Min* Yang, Zhanshuo He, Dimao Zheng, Yang
i-CREATe115	Design and Implementation of a Finger Rehabilitation Device for Stroke Patients
	Wei, Hua*
i-CREATe123	A Device and Smartphone Application of Visual-auditory Stimulation: Regulating Gamma Neural Oscillations for Motor Function Recovery after Stroke
	Jiang, Yuxin Shen, Pingxuan Yang, Yihao Wu, Ruiren Ma, Hongli Tian, Xiaoyu Luo, **Zifan Feng, Wei Wang, Cong***
i-CREATe125	Special Education Teachers' Perception on Assistive Devices Use
	Cheng, Hsin-Yi K* Shen, Wei-Ting Yu, Yu-Chun Ju, Yan-Ying
i-CREATe129	The Development Status, Challenges and Development Trends in Rehabilitation Robotics: A Review
	Zhang, Liyuan Peng, Yige* Qi, Xiaoxuan Bao, Sheng Yuan, Jianjun
i-CREATe136	Predicting Severity of Knee Osteoarthritis Using Bimodal Data and Machine Learning
	Chen, Jiajie* Ma, Bitao Hu, Menghan Sun, Wendell Q.
i-CREATe137	A Novel Control Method of a 5-DOF Exoskeleton Robot for Post-stroke Rehabilitation Training
	Yang, Fan* Tong, Lina Wang, Chen Peng, Liang
i-CREATe142	Design and Simulation of A Novel Electromagnetic Radial Shock Wave Therapy
	Zhou, Xiaomeng* Cui, Fengxi Yang, Zijian Zhao, Chunlei Li, Guanglin Bao, Shi-Chun
i-CREATe143	Impact of Pattern Design on the Performance of Kirigami-inspired Flexible Piezoresistive Strain Sensors
	Shu, Jing Wang, Junming Li, Zheng Tong, Kai-yu*
i-CREATe145	Developing an Online Teaching Platform for Practice in Prosthetics and Orthotics
	He, Chen Jiang, Zonghong* Yi, Yunjing
i-CREATe148	A Real-Time Wearable Biofeedback Device for Optimizing Shoulder Posture and Function during Handwriting in Pediatric Unilateral Shoulder Impairment
	Yu, King-Pong* Tsoi, Kim Ming Chan, Ka-Leung Tong, Kai-yu
i-CREATe150	A Simulation Study on Model Reference Adaptive Trajectory Controller for Back Stretchable McKibben Pneumatic Artificial Muscles
	Zhou, Zhongchao* He, Liang Yu, Wenwei Mao, Shuai
i-CREATe156	Utilizing Jaw Movement Analysis for Early Detection of Swallowing Difficulties in the Elderly
	Hung, Chen Fu Hsu, Min Guo, Lan-Yuen*
i-CREATe158	Can Innovation Pilots Promote Breakthrough Innovation in Rehabilitation Medical Enterprises? — Evidence from Chinese Listed Companies
	Tang, Junyan*
i-CREATe159	Research on Standardization of Robotic Wheelchair
	Ahn, Soonjae* Moon, Inhyuk Choi, Kiwon
i-CREATe160	Investigation of the Reliability of Oculomotor Assessment of Gaze and Smooth Pursuit with a Novel Approach
	Lin, Jeng-Heng Hsu, Min Guo, Lan-Yuen*
i-CREATe165	Design of Assisting Sitting to Standing and Lower Limb Walking Device
	Chen, Xinzhili Yuan, Dong Zhang, Jiafeng Liu, hailiang H Li, Bo*
i-CREATe168	Development of Smart iWakka Healthcare System
	Morita, Yoshifumi* Chokki, Yu Takato, Ryo toshima, kazuya Nomura, Masakazu Uchida, Masaki Yamazaki, Kazunori
i-CREATe170	Research on Measurement System of Upper Limb by Using Single Monocular Web Camera and Inference AI
	Shrestha, Suman Takami, Hibiki Honda, Yuichiro* Irie, Mitsuru
i-CREATe175	Development of an Evaluation Model for Cognitive Decline by Quantification of Motor Learning
	Toshima, Kazuya* Ryo, Takato Tamaru, Tsukasa Morita, Yoshifumi
i-CREATe178	Evaluating Face Validity and Patients' Comprehension of a Mobile Tele-Assessment Interface for Detecting Sensory Impairment in Dermatomal Segments among Individuals with Spinal Cord Injury: A Semi-Structured Interview Study
	Eitivipart, Aitthanatt*
i-CREATe179	Implementing Sensitive Albuminuria Sensor for Rural Healthcare in Thailand
	Japrung, Deanpen*
i-CREATe180	Innovative Human Factors Engineering Teaching Methods in the Major of Rehabilitation Engineering
	Wang, Duojin*

i-CREATe181	Agreement in Measures of Truncal Deviation Between a Wearable Wireless Motion Analysis System and a Standard 3D Gait Analysis System
	Ueawiriyanukun, Chirayu Sangveraphunsiri, Viboon Stonsaovapak, Chernkhuan Piravej, Krisna*
i-CREATe182	Study on the Neuroregulatory Mechanism of Improving Walking Function in Stroke Patients through Transcranial Magnetic Stimulation Combined with Intelligent Gait Training
	Zhang, Wanying*
i-CREATe183	Multi-view 3D Markerless Hand Motion Capture System with Keypoint Triangulation
	Lim, Guan Ming Jatesiktat, Prayook* Ang, Wei Tech
i-CREATe184	Three-Dimensional Gait Analysis and sEMG measures for Robotic-assisted Gait Training in Subacute Stroke A Randomized Controlled Trial
	Zhang, Huihuang*
i-CREATe186	Research on the Correlation Between Respiratory Variability and Levels of Consciousness in Patients with Disorders of Consciousness
	Yongli Wu,Huaping Pan,Yuqing Han
i-CREATe187	Comparison of the Effects of Brain-computer Interfaceandmirror Therapy on Severe Hemiplegic Upper Limb Functions
	He Aiqun, Li Jingbo, Ye Simei, Song Qiushuang, Liu Haiou, He Maoli
i-CREATe189	Exploration of the Teaching Reform in Comprehensive Practice of Rehabilitation Engineering Based on School-Enterprise-Hospital Collaborative Education
	Zhang, Yuling*
i-CREATe190	The Emergence of the Robotics Industry: Organizational Sustainability, Digital Transformation and Distinct Business Models
	Ng, Artie*
i-CREATe191	Application of 3D Anatomy Software in Undergraduate Teaching and Professional Training of Rehabilitation Engineering Major
	Tang, Hongyan*
i-CREATe192	Structural Design and Analysis of Nursing Bed for Assisted Defecation
	Pan, Guoxin*

WRRC06	Design and kinematic Research of a Multi-interaction Integrated Rigid-flexible Coupling Structure Meal Assistance Robot
	Zhou, Zhou* Ren, Hao Mao, Binhao Hu, Bingshan Yu, Hongliu
WRRC07	Advancing Virtual Surgery with Hybrid Soft Tissue Simulation Models
	Wu, Hao* Yang, Han Wang, Jinwu
WRRC08	Constant Force Self-Tuning Control of Bathing Assistance Robots Based on GA-Fuzzy-PID Algorithm
	Zhai, Chang*
WRRC21	Design of Body-weight-support Training System Based on Center of Gravity Prediction
	Li, Xin Zhang, Wenbo Liu, Jinming Wang, Wendong*
WRRC22	Adaptive Oscillator-Based Gait Event Detection and Trajectory Planning for Lower Limb Exoskeleton
	Yang, Xiao Fu, Zhijun Yi, Shuowen Qi, Baiwen Guo, Zhao*
WRRC23	A Particle Swarm Optimal Control Method for a Direct-Drive Electro-Hydraulic Ankle-Foot Prosthesis
	Xiong, YuLong Y*
WRRC24	Parallel Upper Limb Rehabilitation Robot and AnyBody Man-Machine Coupling Analysis
	Pei, Hao* Tao, Qing Su, Na
WRRC28	Characterization Analysis and Stiffness Estimation of Variable Stiffness Actuator for Elbow Exoskeleton
	Qin, Huibin* Duan, Weijie Shi, Xiling Zhang, Zefeng Abbas, Muddaser
WRRC31	Developing a Robot-assisted In Situ Bioprinter Using Extrusion Technology
	Wang, Zitong* Wu, Yuncheng Wang, Jinwu Cui, Yaping
WRRC43	A Usability Evaluation Model for a Bionic Massage Device: A Bionic Massage Device Based on the Seated Knee Adjustment Method as a Validation
	Shen, Yuhan* Wang, Shuyi Shen, Yichun Ma, Bangfeng Wang, Xue Xing, Hua Gong, Li Qin, Wei Zhuang, Yiwei
WRRC48	Acute Pain Reduction Effects of Electrical Muscle Stimulation in Myofascial Pain Syndrome: Comparison with Standard Treatments.
	Churproong, Seekaow* Zhang, Dingguo McGuigan, Polly Metcalfe, Benjamin
WRRC50	A Novel High-torque Biomimetic Knee Exoskeleton Based on the Gear Structure
	liu, ruilin* Hui, Li Yu, Hongliu

WRRC65	Reforming the Undergraduate Curriculum of Biomedical Testing Technology: Challenges and Strategies
	Wang, Minghui Zhang, Yarong* Yu, Hongliu
WRRC67	Exploration and Improvement: Survey and Recommendations on the Institute's Management System
	Wang, Minghui Zhou, Wei* Yu, Hongliu
WRRC69	Qt-based Software System Design for Lower Limb Exoskeleton Safety Testing Platform
	Yan, FeiYu none Wang, Duojin*
WRRC70	Enhancing Stroke Rehabilitation with Synchronous Handles and Interactive Game-Based System
	Li, Zhixin Xu, Yunxin Shi, Yuekai Liang, Kaicheng Wang, Xiangyu Zheng, Renming Hu, Chunxiang Shuaishuai, Han Sun, jie* Yu, Haoyong
WRRC74	Emotional Design of Elderly Companion Robot Based on KANO Model
	Zhao, Xinyi* Liu, Guangdou Liu, Weishang Zhao, Jingwen
WRRC75	Structural Design and Simulation of Multifunctional Nursing Wheelchair
	Chengjia, Wu*
WRRC79	Silicone Cavity Array-based Flexible Sensor Patch for Pressure Injury Monitoring
	Zheng, Yuke* Liang, Bo
WRRC80	Neural Mechanisms Underlying the Improvement of Gait Disturbances in Stroke Patients through Robot-Assisted Gait Training Based on QEEG and fNIRS: A Randomized Controlled Study
	Xiang, Li*
WRRC81	Efficacy and Safety Assessment of Custom 3D-Printed Cervical Pillows for the Treatment of Mechanical Cervical Spondylosis Based on Finite Element Analysis
	Wu, Yuncheng* Yang, Yunxiao Li, Ya Ren, Fuchao Wang, Jinwu Cheng, Yunzhang
WRRC86	Advanced Techniques in Semiconductor Defect Detection and Classification: Overview of Current Technologies and Future Trends in AI/ML Integration
	Chee, K.-W. (G.H.) A.*
WRRC87	Simulation and Analysis of MEMS-Based Flexible Capacitive Pressure Sensors with COMSOL
	Chee, K.-W. (G.H.) A.*

Dates of Convention Activities
23-26 August 2024

Venue
1F & 3F, China Grain Hotel Shanghai
NO.777 Jiamusi Road, Yangpu District, Shanghai, China

Registration
- Information and registration desks are located at China Grain Hotel lobby.
- Please register and receive your registration pack at registration desk.
- Standard registration pack includes: convention badge, convention handbook and lunch box tickets.
- Please receive lunch box in exchange of lunch box ticket which will be included in the registration pack.
- All participants are required to wear their badges in order to enter presentation rooms during this meeting.

Registration Desk Opening Hours
- 22 August 2024, 08:00-20:00, China Grain Hotel lobby
- 23 August 2024, 08:00-20:00, China Grain Hotel lobby
- 24 August 2024, 08:00-18:00, China Grain Hotel lobby

Gala Dinner
- Gala dinner will be held at Diamond Grand Ballroom / 1F, China Grain Hotel
- Date and time: 24 August 2024, 18:00-20:00
- Admission fee: ¥600 CNY / $90 USD per person
- Dress code: Business Attire

gSIC Competition
- There are 2 rounds of judging, including oral presentation and prototype demonstration, which will be on 23 August 2018.
  For Oral Presentation
- Computer and projector will be provided by the organizer. Documents related to the oral presentation (.ppt or .pptx) should be uploaded to the link provided in advance.
- Each team will have 5 minutes to introduce the project to the judges. Then it will be followed by 3 minutes' Q&A.
  For Prototype Demonstration

- On 18:00-21:00, 22 August 2024, prototypes no larger than normal wheel chair can be demonstrated in the Diamond Grand Ballroom D / 1F.
- A panel of international judges of different professional backgrounds will be invited
- to judge on the projects. All judges' score based on the judging criteria will carry
- equal weight and decision of the winners need not be unanimous.
- All teams are required to display their poster and prototype in the Diamond Grand Ballroom D / 1F from 23-25 August 2024.
- The organizer will award the most popular teams. Each gSIC team will have 3 votes for the most popular teams.

GRREC Competition
- There is 1 rounds of judging, which will be on 23 August 2018.
- Computer and projector will be provided by the organizer. Please use flash driver to bring your presentation file.
- Each team will have 8 minutes to introduce the project and demonstrate the prototype to the judges. Then it will be followed by 2 minutes' Q&A.
- A panel of international judges of different professional backgrounds will be invited
- to judge on the projects. All judges' score based on the judging criteria will carry
- equal weight and decision of the winners need not be unanimous.

Mobile Phones / Recording / Video Recording / Photo Shooting
- Please power off your mobile phone or set to the manner mode in the presentation room. Please also refrain from recording / video recording / photo shooting without permission.

Smoking
- Smoking is prohibited in all areas of the congress venue.

Route A
Schedule
27 August 2024

08:30	Gather together in hotel lobby
08:40	Depart for technical tour
09:00	Arrival at the 1st stop
09:00-09:50	Visit Rehabilitation Robotics Laboratory, University of Shanghai for Science and Technology (USST)
10:10	Arrival at the 2nd stop
10:10-11:00	Visit Shanghai First Rehabilitation Hospital (Kongjiang branch)
11:20	Back at China Grain Hotel

About Rehabilitation Robotics Laboratory, University of Shanghai for Science and Technology (USST)

University of Shanghai for Science and Technology (USST) is one of the Oldest universities in China, with the first independent medical device college and the oldest medical device discipline. Since 2006, it has been set up the first undergraduate education program in rehabilitation engineering in the world. In recent years, the discipline of rehabilitation engineering in USST has gotten a fast development relying on the Institute of Rehabilitation Engineering and Technology. Nowadays, there are two provincial-level scientific research platforms, Shanghai Engineering Research Center of Assistive Devices (SERCAD) and Key Laboratory of Neural-functional Information and Rehabilitation Engineering of the Ministry of Civil Affairs.

SERCAD is one of the largest high-level research base on rehabilitation engineering in China. Now SERCAD has a total of 67 people, including 18 professors, 27 associate professors, 50 of whom hold Doctor's degrees. The rehabilitation engineering team has a core team which contains 30 people, including 11 professors and 15 associate professors who are all majored in rehabilitation engineering. This wonderful team has developed a series of innovative rehabilitation devices and technologies. The team mainly conducts researchs in three fields: basic research on neuromodulation and neuro-electrophysiology, basic research on applications of biomechanics and intelligent motion perception, and application research on rehabilitation robots. The emphasis is on the research of intelligent rehabilitation equipment and systems, including three major directions: neural rehabilitation robots, rehabilitation nursing and assistive robots, and intelligent prostheses.

About Shanghai First Rehabilitation Hospital (Kongjiang branch)

The First Rehabilitation Hospital of Shanghai was established in May 2000 as the pioneering institution in the national health system to transition from a secondary comprehensive public hospital to a third-level standard rehabilitation hospital. Originally founded in 1923 as the Sacred Heart Hospital, the First Rehabilitation Hospital of Shanghai is now the Rehabilitation Hospital affiliated with Tongji University (in process), the Yangpu District Rehabilitation Medical Center, and the Rehabilitation Center for Disabled Persons in Yangpu District. Additionally, it serves as one of the first designated rehabilitation institutions for work-related injury insurance in Shanghai and a standardized training and teaching base for resident physicians specializing in rehabilitation medicine. The hospital's transformation project was recognized as one of 20 Things About Shanghai Healthcare Reform and Development when commemorating the 40th anniversary of China's reform and opening-up policy. It has consistently ranked first in Shanghai for four consecutive years in the National Rehabilitation Hospital Influence Ranking List. The hospital has received numerous accolades, including the First Shanghai Ten Innovations Nomination Award, the Advanced Collective of the Shanghai Health and Family Planning System for the period 2015-2017, and Excellent Rehabilitation Hospital in the China Rehabilitation Medical Institution Alliance. It has also been honored as a Shanghai Civilized Unit for seven consecutive years.

In 2019, the Kongjiang branch of the First Rehabilitation Hospital opened, incorporating an international-standard rehabilitation management model. This facility serves as a modern rehabilitation medical service demonstration area, encompassing neurological rehabilitation, musculoskeletal and sports rehabilitation, health management, and rehabilitation engineering research.

The First Rehabilitation hospital of Shanghai is committed to becoming a university-affiliated, tertiary rehabilitation hospital that excels in medical care, teaching, research, and modern management, aiming to achieve international standards, national leadership, and Shanghai excellence.

Route B
Schedule
27 August 2024

08:20	Gather together in hotel lobby
08:30	Depart for technical tour
09:00	Arrival at the 1st stop
09:00-09:50	Visit Engineering Research Center for Traditional Chinese Medicine Intelligent Rehabilitation, Shanghai University of Traditional Chinese Medicine
10:10	Arrival at the 2nd stop
10:10-11:00	Visit Rehabilitation Center of Shanghai Huashan Hospital
11:30	Back at China Grain Hotel

About Engineering Research Center for Traditional Chinese Medicine Intelligent Rehabilitation, Shanghai University of Traditional Chinese Medicine

The Engineering Research Center for Traditional Chinese Medicine Intelligent Rehabilitation, under the Ministry of Education (ERC-TCMIR), was established in December 2019. This center capitalizes on the strengths of universities to focus on the functional rehabilitation and reconstruction for brain diseases. It aims to construct a vast, multimodal database and cloud platform that integrates the traditional Chinese Medicine (TCM) four-diagnosis and syndrome differentiation information, rehabilitation function assessment data, and brain science technology insights. The center is dedicated to advancing research in machine learning and artificial intelligence algorithms to accurately pinpoint key neural circuits essential for functional recovery. It endeavors to develop personalized and standardized TCM intelligent rehabilitation treatment plans, leading to the creation of innovative diagnostic and treatment technologies, rehabilitation equipment, and application standards in TCM intelligent rehabilitation. These advancements will possess independent intellectual property rights and core competitiveness, particularly in making breakthroughs.

The initiative aligns with the national health strategy, addressing the challenges posed by an aging population and propelling the rapid and healthy growth of China's rehabilitation industry. Furthermore, the center fosters close collaboration with leading global rehabilitation engineering institutions to cultivate top-tier talent in TCM intelligent rehabilitation. It aims to establish a premier brain rehabilitation innovation team in China, positioning itself as a multidisciplinary platform that bridges Traditional Chinese and Western medicine, rehabilitation, brain science, and intelligent engineering. The center is committed to becoming a national-level platform for scientific and technological innovation, driving forward the field of TCM intelligent rehabilitation.

About Rehabilitation Center of Shanghai Huashan Hospital

The Rehabilitation Center of Shanghai Huashan Hospital is located in Pudong District of Huashan Hospital, covering an area of 400 square meters, including physical therapy and manual therapy area and sports health assessment laboratory. The center has a strong cultural color of physical and medical integration, fully reflects the characteristics of physical and medical integration in the context of major sports medicine, and works with 11 strategic partners to jointly promote the development of sports and health.

北京大艾机器人科技有限公司

公司介绍

大艾机器人是中国权威的外骨骼机器人治疗解决方案提供商，先进康复机器人持续原始创新的引领者，开创了国内外骨骼康复机器人行业及其创新的临床研究方向，处于外骨骼机器人国际并跑或领跑地位。

大艾机器人获得首个二类创新医疗器械、首个药监局外骨骼机器人医疗器械注册证，是国家药监局医疗机器人标准化技术归口单位之一。推动了科技康养及康复机器人行业的发展，成为临床治疗优效工具，改变了截瘫、偏瘫、脑瘫等重大恶性疾病难以康复现象，建立智能康复医学新格局。

大艾机器人是2022年冬残奥会火炬传递及火炬汇集代表，并在2023年承担了"可恢复性弱能老人高相容性照护康复机器人技术与系统研发"等多项国家重点研发计划，同时在2024年大艾机器人生产基地落户泸州国家高新区，标志着高科技康复医疗设备的本地化生产迈出了重要一步。泸州生产基地的建立不仅会促进当地经济发展，还为全国乃至全球的康复医疗设备市场提供更优质的产品。

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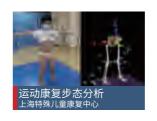智能脑电图机

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核心产品 --NOKOV 度量光学三维动作捕捉系统，是一种实时的高精度三维空间定位设备，具有亚毫米级定位精度，可实时进行动作数据采集，通过多模态同步信号收发器，与三维测力平台、三维测力跑台、表面肌电仪、足底压力测量仪等设备连接，实现行走、跑步等运动学数据的精确同步。可广泛应用于人体运动分析、运动控制和神经科学、人机工效学研究、人形机器人/康复机器人等领域。目前，NOKOV 度量动捕已助力众多高校实验室和医院开展相关领域的研究工作。

应用案例

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世纪天鸿集团成立于1998年，主要经营各类运动、健身、体能测试、体能训练、体能恢复、生物医学、运动生理学、运动训练学、康复医疗、人体工程学等各类产品，致力于为客户提供设计、安装、培训、科研、以及实验室的建设等一体化、综合性优质服务。

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Welcome Address from General Chair

上海卓道医疗科技有限公司　COMPANY PROFILE

　　上海卓道医疗科技有限公司成立于2015年，是国内从事高端康复机器人和智能康复综合解决方案研发与产业化的上海市高新技术企业。公司累计数十次承担国家重点研发计划和上海市科技创新计划，是上肢康复训练机器人国家标准的起草单位。

　　公司拥有数百人的团队，核心团队拥有多年的康复机器人研发经验与医疗器械项目管理经验。通过持续创新，公司已研发十余款全球技术领先的康复机器人，其中多款产品已获得中华人民共和国第二类医疗器械注册证，在全国近千家知名医院和机构中装机应用。公司荣获多项国家级、省部级荣誉称号及奖项，多次被中央电视台《新闻联播》等主流媒体采访报道。卓道医疗®致力于传统康复产业的数字化升级和智能化改造，已逐渐成长为具有全球视野和行业影响力的高科技领军企业。
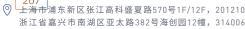
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■ 企业简介

深圳作为科技有限公司创建于2019年，是一家集研发、设计、制造、销售及服务于一体的综合性国家级高新技术企业。

公司专注于失能老人的智能护理，围绕失能老人的大小便、洗澡、吃饭、上下床、走动、穿衣等六项护理需求提供智能护理设备与智慧护理平台的综合解决方案。

创始团队由一批来自华为、中国移动、顺丰、比亚迪等世界五百强企业及清华大学、香港大学、复旦大学、华中科技大学、加州伯克利分校等知名高校的高管与研发团队组成，在人工智能、医疗器械、临床医学转化等领域有近20年的深耕。

公司拥有逾300项自主知识产权，含98项发明专利和69项软著，在智能护理行业遥遥领先。产品资质齐全，通过美国FDA、欧盟CE、英国UKCA等重要认证，出口海外40多个国家和地区。荣获德国红点奖、中国首批适老化产品认证、入选国家工信部老年用品推广目录等殊荣，是2023年年度智能护理品牌及全国36家智慧康养示范企业之一，CCTV2《经济半小时》连续两次专题报道、国家发改委3次邀约座谈及出国考察。

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Introduction to USST

USST is one of the oldest universities in China with the history going back to Shanghai College established in 1906 and the German Medical and Engineering School founded in 1907. In 1906, the Northern and Southern Baptists of the United States established Shanghai College on the shore of the Pujiang River. In 1928, Dr. Liu Zhan'en (1896-1938), an educator, patriot and social activist, served as its first Chinese president, and Shanghai College was thus integrated into China's national education system. In 1922, the Chinese and French governments jointly established the Institut Technique Franco-Chinois de Shanghai on the original site of the German School of Medicine and Engineering. After the victory of the Chinese People's War of Resistance Against Japanese Invaders (July 7,1937-September 2, 1945), the Institut Technique Franco-Chinois de Shanghai merged with the National Advanced Vocational School of Mechanical Technology, which was once relocated in Chongqing, to establish the National Advanced Vocational School of Mechanics (NAVSM). After the founding of the People's Republic of China in 1949, NAVSM was re-instituted as Advance Vocational School of Mechanics (AVSM) and was later renamed Shanghai Institute of Mechanical Technology (1983-1996)(SIMT). In 1996, Shanghai Institute of Mechanical Engineering and East China University of Technology were merged and reshuffled as the University of Shanghai for Science and Technology (USST). In 1998, the management of USST under the Ministry of Machinery Industry of China was transferred to Shanghai Municipal Government. During the past one hundred years of ups and downs, nurtured a large army of academic elites, engineering experts and social luminaries, and trained over 100,000 outstanding professionals for our country, earning itself the title of "Whampoa Military Academy in manufacturing industry" in China.

7 Academicians from the Chinese Academy of Sciences or Chinese Academy of Engineering（adjunct academicians included）

974 Professors or associate professors of different fields

28 First-level disciplines authorized to offer master degrees

8 First-level disciplines authorized to offer doctoral degrees

1158 full-time teachers with doctoral degree

64 Undergraduate programs

7 National-level engineering education practice centers

6 Pilot majors for the cultivation of outstanding engineers under the sponsor of the Ministry of Education

Rehabilitation Engineering Discipline in USST

USST has the earliest medical device discipline and the first rehabilitation engineering major in China. Its Institute of Intelligent Rehabilitation Engineering(IIRE) has two provincial-level research platforms, the "Shanghai Engineering Research Center of Assistive Devices" and the "Key Laboratory of Neuro-functional Information and Rehabilitation Engineering under the Ministry of Civil Affairs". IIRE has also been approved as a "Key Innovation Team for Rehabilitation Engineering" of high-level university in Shanghai, becoming the largest rehabilitation engineering research and talent training base among domestic universities. Under the leadership of Professor Yu Hongliu, a Model Worker of Shanghai and chief expert of research project of the National Key R&D Program of China, the team has achieved a number of high-level scientific research achievements in recent years, winning 8 awards of scientific and technological achievements at provincial and ministerial level. The number of rehabilitation engineering patents ranks first among global scientific research institutions (according to WIPO statistics), and it is also one of the teams with the most transformations of patented technological achievements in this field worldwide. It initiated the establishment of the "World Rehabilitation Engineering and Devices" magazine and the World Rehabilitation Robot Convention. It becomes an important industry institution affiliated with the Technical Committee of Rehabilitation Engineering and Industry Promotion under the Chinese Rehabilitation Medicine Association and the Professional Committee of Rehabilitation Equipment of the China Association of Assistive Products. It is also the former and current president-elect institution of the Coalition of Rehabilitation Engineering and Assistive Technology,Asia(CREATe Asia).

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上海青瞳视觉科技有限公司(SHANGHAI CHINGMU VISION TECHNOLOGY CO., LTD)创立于 2015 年，公司总部位于中国上海，并在全国设有分支机构。青瞳视觉是一家高科技领先企业，以计算机视觉和人工智能技术为核心，专注于 3D 智能感知和人机交互系统的研发、生产、销售和服务，并提供定制化的全流程解决方案，满足各行业应用需求。

自主研发并生产具有国际领先水平的红外光学动作捕捉系统，多次荣获设备和技术创新荣誉。公司的产品和技术广泛应用于康复机器人、仿生机器人、工业机器人、机械臂、协同控制、手术导航、医疗康复等场景，为机器人控制研究、算法验证提供坚实的数据支撑，以及创新思路和新生动能。此外，公司以国际化视野立足全球，产品远销亚洲、欧洲和美洲等地，致力于达成卓越的技术水平和服务品质，为客户提供全栈式数字化方案，捕捉每一帧精彩。

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