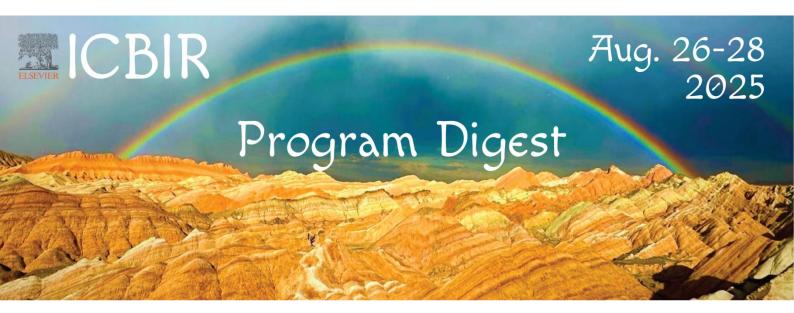
# 2025 International Conference on Biomimetic Intelligence and Robotics















## ICBIR 2025 Program at a Glance

	Tuesday, August 26, 2025			
14:00-18:00	Registration (Look for location information in the hotel lobby)			
	Tuesday, August 26, 2025			
Time \ Room	Room 1, Third Floor	Room 2, Third Floor	Room 3, Third Floor	
14:00-15:40	Award Session TA-Rm1	Invited Talk Session TA-Rm2	BIROB Forum Session TA-Rm3	
15:40-16:00	Tea and Coffee Break & Poster			
16:00-18:00	Award & Regular Session TB-Rm1	Invited Talk Session TB-Rm2	BIROB Forum Session TB-Rm3	
18:00-20:30	Dinner			
	Wednesday, August 27, 2025			
08:30-08:40	Welcome Ceremony			
08:40-09:20	Plenary Session I  LIN Jian, Southern University of Science and Technology			
09:20-09:55	Plenary Session II  QIAO Jianzhong, Beihang University			
09:55-10:15	Tea and Coffee Break & Poster			
10:15-10:50	Plenary Session III FENG Enbo, East China University of Science and Technology			
10:50-11:25	Plenary Session IV			
10.50-11.25	XU Chenjie, City University of Hong Kong			
11:25-12:00	Plenary Session V  MIN Zhe, Shandong University			
12:00-14:00	Lunch at restaurant			
Time \ Room	Room 1, Third Floor	Room 2, Third Floor	Room 3, Third Floor	
14:00-15:40	Regular Session WA-Rm1	Regular Session WA-Rm2	BIROB Forum Session WA-Rm3	
15:40-16:00	Tea and Coffee Break & Poster			
16:00-18:00	Regular Session WB-Rm1	Regular Session WB-Rm2	BIROB Editorial Board Meeting WB-Rm3	
18:00-20:30	Banquet			

#### Welcome

On behalf of the Organizing Committee, we would like to extend a warm welcome to you all to Zhangye, Gansu, China for the 2025 Elsevier International Conference on Biomimetic Intelligence and Robotics (ICBIR). ICBIR is an affiliated event of the Elsevier Journal of Biomimetic Intelligence and Robotics and ICBIR 2025 marks the 4th event of the ICBIR conference series. We are pleased to welcome you to this year's event in the beautiful city of Zhangye, Gansu, China as a forum for facilitating timely and productive academic and scientific exchanges among interested parties in AI, robotics, biomimetics, intelligent medicine and related areas.

We are very honored to have invited Prof. GUO Lei of Beihang University, Prof. LIN Jian of Southern University of Science and Technology, Prof. FENG Enbo of East China University of Science and Technology, Prof. XU Chenjie of City University of Hong Kong, and Prof. MIN Zhe of Shandong University to deliver five plenary and keynote speeches. ICBIR 2025 strives to offer all participants a great experience with excellent technical and social programs.

We wish to express our gratitude to those who have contributed to the organization of this conference. Special thanks are extended to our colleagues in the International Program Committee for their thorough paper review work. We also extend our thanks to Organizing Committee members and especially the volunteers who have dedicated their time to ensure the success of this conference. Finally, we thank all the participants for their participation in making this conference a great success.

We encourage you to stay beyond the conference to appreciate the beauty of Zhangye and Gansu. We wish you an enjoyable stay during the conference in Zhangye.



REN Hongliang General Chair



SONG Rui General Chair



CHI Wenzheng Program Chair



WANG Chaoqun Program Chair

# 特邀大会报告 Plenary Talks

#### **Plenary Talks**

## International Advances in AI-Enabled Global Ocean and Deep Sea Exploration Professor Jian LIN



Professor Jian Lin is an internationally renowned geophysicist, a member of Academia Europaea and European Academy of Sciences. He is the Director of Advanced Institute for Ocean Research, Southern University of Science and Technology, and leads the construction of Shenzhen Ocean University. He has made seminal contributions to global ocean sciences and earthquake research. Prof. Lin was a Chair of the InterRidge International Science Program, Senior Scientist at the Woods Hole Oceanographic Institution (WHOI), and a faculty member of the Massachusetts Institute of Technology - WHOI Joint Program in Oceanography. He was elected a fellow of American Geophysical Union, Geological Society of America, American

Association for the Advancement of Science, and Henry Bigelow Chair Award for Excellence in Oceanography. Prof. Lin is a recipient of the 2024 Axford Medal Award by the Asia Oceania Geosciences Society. His research was recognized as the Top Ten Advances in Ocean Science and Technology (2019), First Prize of Natural Science Award of Guangdong Province (2020), Grand Prize of Ocean Science and Technology Award (2021), and Top Ten Advances in China for Oceanology and Limnology (2023). He has published close to 300 papers in high-impact international journals including Nature and Science; one of his earthquake research papers was ranked by the Institute of Scientific Information as the most-cited paper in a decade.

## Bionic Intelligent Navigation and Control Technology for Unmanned Systems Professor Jianzhong QIAO



Professor Jianzhong Qiao, from the School of Automation Science and Electrical Engineering at Beihang University, is a recipient of the National Science Fund for Distinguished Young Scholars (Category A). His research has long focused on the navigation, guidance, and control of aerospace vehicles. He serves as an expert on several national committees, including the Science and Technology Commission of the Central Military Commission, and the Ministry of Science and Technology's major national project on "On-Orbit Service". He has led more than 15 major projects, such as the National Natural Science Foundation of China (NSFC) Young Scholars Program (Category A), the Excellent Young Scientists Fund

(YouQing), the NSFC Key Program, and advanced research programs for the Rocket Force, Air Force, and Army, as well as key basic enhancement projects supported by the Science and Technology Commission of the Central Military Commission. His research achievements have been applied to the development and testing of multiple

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aerospace vehicle models in leading national institutes. He has published over 50 SCI-indexed papers, holds more than 50 authorized national invention patents, and spearheaded the formulation of two team/defense standards. His outstanding contributions have earned him numerous prestigious awards, including the First Prize of the Ministry of Education Technological Invention Award (2022), the First Prize of the China Instrument and Control Society Technological Invention Award (2020), the First Prize of the China Inertial Technology Society Technological Invention Award (2025), and the Innovation First Prize of the China Invention Association Invention and Entrepreneurship Award (2025).

## Experimental Research and Industrial Significance of the Spatiotemporal Granularity Formation Mechanism of Human Memory Professor Enbo FENG



Professor Enbo Feng is the Deputy Director of National Center of Technology Innovation for Smart Process Manufacturing and a Chair Professor at East China University of Science and Technology (ECUST). He received his Ph.D. from ECUST in 1991 and subsequently conducted postdoctoral research at Tsinghua University, the National University of Singapore, and the University of Alberta, Canada. He has previously held positions as Principal Engineer of Advanced Process Control and Optimization at Shell plc and Head of the Advanced Control and Optimization Department at a Petro-Canada. Control and Optimization Department at a Petro-Canada.

# Development of Microneedle Devices with Anisotropic Porous Structure for Biomedical Application Professor Chenjie XU



Professor Xu focuses on the development of microneedle-based biomedical devices for transdermal drug and cell delivery, with applications in disease diagnosis and treatment. His innovative work explores the use of anisotropic porous microstructures, conductive microneedles, and cryomicroneedles to enhance the efficacy and precision of therapeutic delivery. His research findings have been published in leading journals such as Nature Biomedical Engineering, Nature Reviews Bioengineering, Matter. Science Advances, Nature Communications, Biomaterials, and ACS Nano. Prof. Xu has received numerous prestigious awards, including the National Science Fund for Distinguished Young Scholars (2024) and recognition as one of

Stanford's top 2% most highly cited scientists for multiple years (2024, 2023, 2022, 2011).

## **Key Technologies for Intelligent Autonomous Surgical Robots: Starting from Registration Application**

#### **Professor Zhe MIN**



Professor Min is a Professor and Ph.D. supervisor at Shandong University, recognized as a National High-Level Young Talent and a Distinguished Mid-to-Young Scholar (First Tier) at Shandong University. He is also an Honorary Lecturer at University College London. He received his Bachelor's degree in 2014 from the School of Control Science and Engineering at Shandong University and earned his Ph.D. in Electronic Engineering from The Chinese University of Hong Kong in 2019 under the supervision of Prof. Qinghu Meng, Fellow of the Canadian Academy of Engineering. From 2019 to 2023, he conducted postdoctoral research at The Chinese University of

Hong Kong and University College London. Prof. Min's research focuses on medical robotics and artificial intelligence, with over 80 publications. He currently leads projects including the National Overseas Young Talent Program and the National Natural Science Foundation of China (NSFC) Young Scientists Fund. He serves as a review expert for NSFC, Associate Editor for IEEE Transactions on Automation Science and Engineering (TASE) and IEEE Robotics and Automation Letters (RAL), Academic Editor for Biomimetic Intelligence and Robotics, and Young Associate Editor for Robot, SmartBot, and Robot Learning journals.



#### **August 26 Award Session TA-Rm1**

7 min presentation, 3 min Q and A; Chairs: Shilong Yao and Guankun Wang

No. 33, 14:00-14:10

Wavelet-guided Multi-scale Semantic Fusion for Gastrointestinal Lesion Detection

No. 44, 14:10-14:20

**CNN-Transformer Based Temporal-Spatial Fusion Network for EEG-fNIRS Hybrid Decoding** 

No. 50, 14:20-14:30

Real-Time Robotic Grasp Stability Detection via DynConv-MIL: A Lightweight Deep Learning Approach

No. 64, 14:30-14:40

LiteDHAZE: An Adversarial Dehazing Network for Robust Robotic Perception in Challenging Visual Conditions

No. 74, 14:40-14:50

DINOv2-Enhanced Surgical Instrument Segmentation with Lightweight CNN

No. 80, 14:50-15:00

Design, Modeling and Experimental Investigation for a Helix-based Cable-Driven Soft Continuum Robot

No. 91, 15:00-15:10

A Soft, High-frequency Oscillator for Autonomous Movement of a Soft Robot

No. 100, 15:10-15:20

A Binocular Vision-based Method for Real-time 3D Localization of Surgical Instrument End-Effectors

No. 115, 15:20-15:30

**Quantitative Monitoring of Gap and Tension Balance in Total Knee Arthroplasty Using a China-Developed Surgical Robot: A Prospective and Comparative Study** 

No. 128, 15:30-15:40

A Self-healing Stretchable Hydrogel Sensor for Hand Movement Disorder Monitoring

#### August 26 Award & Regular Session TB-Rm1

7 min presentation, 3 min Q and A; Chairs: Tangyou Liu and Min Wang

No. 72, 16:00-16:10

Speeding Up Tracked Mobile Soft Robots by Multiple Origami Actuators

No. 82, 16:10-16:20

Robotic-Assisted Endoscopic OCT for Rapid, Non-Destructive Inspection of Turbine Film-Cooling Holes: A Proof-of-Concept Study

No. 83, 16:20-16:30

MPC-SCBF: Model Predictive Control with Social Zone-Driven Control Barrier Function for Socially-Aware Following Robots

No. 84, 16:30-16:40

Design of A Rigid-Flexible Coupling Human-like Dexterous Finger

No. 130, 16:40-16:50

Unlocking Mixed Reality for Medical Education: A See-Through Perspective on Head Anatomy

No. 2, 16:50-17:00

Real-time Scene Reconstruction and Human Detection Fusing 3D LiDAR and Infrared for Rescue Robots

No. 25, 17:00-17:10

Research on Flexible Object Grasping Method Based on Visual Enhancement and Multi-Stage Collaboration

No. 29, 17:10-17:20

PS-LIPM and G-ALIP: Novel Models for Robust Bipedal Locomotion on Discrete Uneven Terrains

No. 30, 17:20-17:30

Motion Control of Wheeled-Legged Quadrupeds on Complex Terrains via Integrated Latent Encoding

No. 31, 17:30-17:40

Bridging Exploration and Safety: A Distilled NP3O Framework for Constrained Reinforcement Learning in Legged Robots

No. 34, 17:40-17:50

Neural Network-Based Adaptive Control in Task-Space for Dual-Arm Space Manipulators

No. 35, 17:50-18:00

Design and Analysis of a Flapping-Wing Aircraft with Multi-Degree-of-Freedom Deformable Tail and Wing

#### **August 26 Invited Talk Session TA-Rm2**

Chairs: Huxin Gao and Shijian Su

14:00-14:20 | Yutong Ban (Shanghai Jiao Tong University)

Video Understanding for Intelligent Surgical Robotics

14:20-14:40 | Yi Zhang (University of Electronic Science and Technology of China)

Multimodal Magnetically Driven Deformable Microrobots via 3D Printing

14:40-15:00 | Ning Tan (Sun Yat-sen University)

**Universal Control of Flexible Continuum Robots** 

15:00-15:20 | Changsheng Li (Beijing Institute of Technology)

Advanced Technologies for Robot-Assisted Surgeries in Narrow Cavities of the Human Body

15:20-15:40 | Tianliang Li (Wuhan University of Technology)

Catheter Surgical Robot with Optical Fiber Distal Force Sensing

#### **August 26 Invited Talk Session TB-Rm2**

Chairs: Jiewen Lai and Zhe Min

16:00-16:20 | Zhuang Zhang (Fudan University)

Origami-Based Structures for Multimodal Soft Actuation and High-Fidelity Haptics

16:20-16:40 | Huxin Gao (The Chinese University of Hong Kong)

**Development of A Robotic System for Gastrointestinal Endoscopic Surgery** 

16:40-17:00 | Murong Li (Beihang University)

A Novel Full-prediction Model of Needle-tissue Coupled Deformation and Its Applications in Needle Path Planning

17:00-17:20 | Te Li (Zhejiang University)

Research Status and Challenges in High-Quality Embodied Intelligence Datasets

17:20-17:40 | Hongqiang Wang (Southern University of Science and Technology)

Stronger, Smaller, and More Reliable Electrostatic Film Actuators and Robots

17:40-18:00 | Zhao Guo (Wuhan Universirty)

Design and Control of Lower Limb Rehabilitation Exoskeleton Robots for Patients with Hemiplegia

#### **August 26 BIROB Forum Session TA-Rm3**

Chairs: Lin Wang and Fengkui Cao

14:00-14:10 | Xingang Zhao (Shenyang Institute of Automation, CAS)

**Exoskeletal Assistive Technology for Rehabilitation** 

14:10-14:20 | Gang Chen (Zhejiang Sci-Tech University)

New Type of Underwater Bionic Robot and Its Motion Control

14:20-14:30 | Xinmeng Ma (Hebei University of Technology)

Only Three Key Parameters Allow the FWMAV to Achieves and Even Surpasses All High Maneuverability Like a Butterfly

14:30-14:40 | Yang Yang (The Chinese University of Hong Kong)

Regraftable Submillimeter Magnetic Continuums

14:40-14:50 | Zebing Mao (Zhejiang university)

Fine-tuned Multimodal Large Language Model for Autonomous State Cognition System of Shape-recognition 6-bar Tensegrity Integrated with Flexible Sensors

14:50-15:00 | Nan Ma (Northwestern Polytechnical University)

Continuum Robot for In-site Inspection and Maintenance of High-value Equipment

15:00-15:10 | Liang Gao (Harbin Institute of Technology)

Adaptive Landing Control and Analysis for Flying Quadrupedal Robots on Irregular Terrain

15:10-15:20 | Wujing Cao (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences)

**Key Technologies and Applications of Lower Limb Exoskeletons** 

15:20-15:30 | Laihao Yang (Xi'an Jiaotong University)

Mini-Invasive Maintenance Continuum Robots for Aero-Engines

#### **August 26 BIROB Forum Session TB-Rm3**

Chairs: Kun Yang and Shuwei Shao

16:00-16:10 | Houde Dai (Fujian Institute of Research on the Structure of Matter, CAS)

Whole-body Motion Tracking Based on Wireless Electromagnetic Tracking and Capacitive Plantar Pressure Distribution Measurement

16:10-16:20 | Shijian Su (Huagiao University)

A Wearable, Reconfigurable, and Modular Magnetic Tracking System for Wireless Capsule Robots

16:20-16:30 | Yuhan Chen (Dalian University of Technology)

**Direct Visual Servoing Based on Discrete Orthogonal Moments** 

16:30-16:40 | Yapeng Shi (Harbin Institute of Technology)

**Humanoid Robot Embodied Intelligence Theory and Application** 

16:40-16:50 | Wei Meng (Wuhan University of Technology)

Flexible Rehabilitation Robots Integrating Wearable Fiber-optic Sensing

16:50-17:00 | Kai Wu (South China University of Technology)

**Challenges in Smart Robotic Manufacturing System** 

17:00-17:10 | Ziwei Wang (Lancaster University)

**Integrating Gaze-Based Control and Haptic Teleoperation for Enhanced Human-Robot Collaboration in Diverse Environments** 

17:10-17:20 | BIRob Journal Paper

Learning-based Locomotion Control Fusing Multimodal Perception for a Bipedal Humanoid Robot

17:20-17:30 | BIRob Journal Paper

Bioinspiration Review of Aquatic Unmanned Aerial Vehicle (AquaUAV)



#### **August 27 Regular Session WA-Rm1**

7 min presentation, 3 min Q and A; Chairs: Yang Yang and Zhiwei Fang

No. 37, 14:00-14:10

Fusion of Reinforcement Learning and Simplified MPC for Path Tracking in Autonomous Vehicles

No. 38, 14:10-14:20

Knowledge Distillation-Based Lightweight Image Compression Method

No. 39, 14:20-14:30

End-to-End Decoding of Motion Intention from fNIRS Signals Using Deep Learning Framework

No. 41, 14:30-14:40

Conformable Vision-Based Tactile Sensor with Enhanced Soft Elastomer Design for Palpating Irregular Anatomical Surfaces

No. 43, 14:40-14:50

Design and Experimental of a Bio-inspired Tendon-driven Space Manipulator

No. 47, 14:50-15:00

Single-fiber Forward-viewing A-scan Optical Coherence Tomography Allows Robot-assisted Blood Vessel Detection and Hemodynamic Monitoring in Complex Luminal Anatomies: A Phantom Study

No. 49, 15:00-15:10

Research on Obstacle Avoidance Motion Planning of Robotic Arm Based on RG-DQN

No. 53, 15:10-15:20

Class Attention-aware Knowledge Distillation for Pathological Score Prediction in Endocytoscopy Images

No. 54, 15:20-15:30

Kangaroo Combat-Inspired Magnetic Soft Robot with Tail Support for Multi-Modal Locomotion

No. 55, 15:30-15:40

PKB-POMDP: Prior Knowledge Based POMDP Deep Reinforcement Learning Method

#### **August 27 Regular Session WB-Rm1**

7 min presentation, 3 min Q and A; Chairs: Long Bai and Yanan Wu

No. 56, 16:00-16:10

Pre-contact Configuration Optimization for Space Dual-arm Capture Considering Contact and Collision Effects

No. 57, 16:10-16:20

Development of SMA-Driven Origami Actuator with Large Deformation and High Foldability

No. 58, 16:20-16:30

Die-based Rapid Bending Robotic System for Orthodontic Archwires

No. 60, 16:30-16:40

Magnetically Actuated Coscinodiscus Radiatus-based Microrobots with Concurrent High Mechanical Strength and Excellent Biodegradable Properties

No. 61, 16:40-16:50

Global-Local Interplay with Transformer and GCN for 3D Human Pose Estimation

No. 62, 16:50-17:00

Research on Reset Compensation Mechanism Based on SMA Soft Actuator

No. 63, 17:00-17:10

Gesture-to-Robot Mapping in a Mixed Reality System for Safe Bronchoscopic Teleoperation

No. 68, 17:10-17:20

How Many Tags and Which Material? Assessing Minimal Tag Impact and Material Effects on the Performance of Origami Fiducial Force-Torque Sensors

No. 69, 17:20-17:30

**Intelligent Planning Method for Femoral Tunnel Placement in Anterior Cruciate Ligament Reconstruction Surgery** 

No. 71, 17:30-17:40

A Respiratory Motion Compensation Method for Robotic-Assisted Laminectomy

No. 76, 17:40-17:50

High-Altitude Challenges: Desirable Efficacy of A China-Developed Surgical Robot in Total Knee Arthroplasty at the Roof of the World

No. 78, 17:50-18:00

Kinematic Synthesis of Flexible Manipulator for Spinal Endoscopic Surgery via Bayesian Optimization with Multi-Physical Constraints

#### **August 27 Regular Session WA-Rm2**

7 min presentation, 3 min Q and A; Chairs: Wenchao Yue and Tinghua Zhang

No. 87, 14:00-14:10

**CMR Image Myocardial Lesion Segmentation** 

No. 88, 14:10-14:20

Kinematic Modeling of A Pneumatic Tubular Bending Actuator for Robotic Navigation in Narrow Luminal Organs

No. 90, 14:20-14:30

A Prosthetic Wrist Proprioceptive Feedback Closed Loop System based on Electrotactile Substitution For Transradial Amputees

No. 94, 14:30-14:40

Over-constraint Reduction Method for the One-DOF Deployable Trusses Based on the Modules with Boundary Determinability

No. 95, 14:40-14:50

Dynamic Obstacle Avoidance Planning for Large-wingspan Flapping-wing Aircraft Along a Straight Path Under Periodic Equivalent Attitude Control

No. 96, 14:50-15:00

TSSG: A Two-Stage Segmentation and Grasping Model for Enhancing Grasping Precision

No. 99, 15:00-15:10

Surgical Action Collaboration Through Multimodal Large Language Model-Driven Surgical Tool Dialogue in Robotic Assisted Surgery

No. 101, 15:10-15:20

Efficient Multi-Agent Reinforcement Learning for Dexterous Manipulation: A Hierarchical Framework with Opponent Modeling

No. 105, 15:20-15:30

**EndoSMAP: A Semi-automatic Multimodal Annotation Software for Endoscopic Point Tracking** 

No. 106, 15:30-15:40

A Multi-Stage Reward-Guided Learning Method for Complex Motions of Humanoid Robots

#### **August 27 Regular Session WB-Rm2**

7 min presentation, 3 min Q and A; Chairs: Sishen Yuan and Xiaofeng Deng

No. 108, 16:00-16:10

**Exploiting Differential Optical Absorption for Automated High-Precision Spatial Calibration in Robotic Photoacoustic Imaging** 

No. 109, 16:10-16:20

An Avian-inspired Mechanism for UAVs Perching and Grasping

No. 111, 16:20-16:30

Socially Adaptive Navigation via Recursive Generative Knowledge Learning and Transfer

No. 112, 16:30-16:40

Delay-aware Teleoperative Training System For Transcontinental Robot-assisted Minimally Invasive Trajectory Following

No. 114, 16:40-16:50

Design and Characteristics of Motion Scaling Manipulator for Enhanced Microsurgical Applications

No. 119, 16:50-17:00

Weakly-Supervised 2D-3D Cardiac Ultrasound Registration with ROI Segmentation and Test-Time Optimisation

No. 126, 17:00-17:10

A Novel Model for Outdoor Abnormal Gait Recognition Based on Multi-View Kinect Data and Graph Convolution

No. 129, 17:10-17:20

Multi-National Validation of 5G-Enhanced Teleoperation with AR Interface and LSTM Prediction for Flexible Robotic Endoscopy with Sub-500ms Latency

No. 132, 17:20-17:30

Multiscale Structured PS Nonwoven Materials via Solution Blow Spinning for Intelligent Robotic Air Filtration Systems

No. 133, 17:30-17:40

Bioinspired Soft Strain Sensors Based on Screen-Printed TPU Nonwovens for Wearable Robotics

No. 102, 17:40-17:50

Augmented Reality Navigation with Optical Coherence Tomography in Robotic Neurosurgery

No. 89, 17:50-18:00

Physics-Informed Neural Networks for Quasi-Static Tip Position Control of Magnetic Soft Robots

#### **August 27 BIROB Forum Session WA-Rm3**

Chairs: Weinan Chen and Tianliang Li

14:00-14:10 | Sishen Yuan (The Chinese University of Hong Kong)

Endoscopic Therapy in Narrow, Tortuous Luminal Tracts: Techniques and Strategies

14:10-14:20 | Long Bai (Alibaba DAMO Academy) / Jiewen Lai (CUHK)

**Intelligent Perception Enhancement and Multimodal Interaction in Computer-Assisted Intervention** 

14:20-14:30 | Yong Zhong (South China University of Technology)

**Underwater Bionic Propulsion Mechanism and Robot Systems** 

14:30-14:40 | Ying Zhang (Yanshan University)

Large-scale Models-driven Service Robot Skill Learning

14:40-14:50 | Sheng Xu (Shenzhen Institutes of Advanced technology, CAS)

Optimal Sensor Placement for Target Localization in Robotic Systems: Models, Technologies, Implementations and Challenges

14:50-15:00 | Dingkun Liang (Zhejiang University of Technology)

**Embodied Perception, Planning, and Control for Humanoid Robots** 

15:00-15:10 | Min Wang (Central South University)

Magnetically Inner Actuated Millirobot with High Impulse Force for Heavy Cargo Delivery

15:10-15:20 | Lihang Feng (Nanjing Tech University)

Design and Implementation of a Planetary Robotic Wheel-on-Limb system for Wheel-Terrain Interactions

15:20-15:30 | Tangyou Liu (The Chinese University of Hong Kong)

Miniature Distal Force Sensing and Control for Safe and Autonomous MIS

### 会议酒店介绍

张掖宾馆是西北乃至全国占地规模较大的一家集住宿、餐饮、商务、度假、会展、娱乐、健身等功能于一体,融汇现代建筑艺术、专业服务手段、丝路文化元素,坐拥湖光山色、绿地草坪、飞瀑珍禽的山水园林式酒店。张掖宾馆坐落于张掖滨河新区水源涵养区北湖北岸,紧邻张掖滨河新区中央商务区,距连霍高速公路张掖下线口和兰新高铁张掖站约10分钟车程,距兰新铁路张掖站约20分钟车程,距张掖机场约30分钟车程。是张掖市委、市政府决定拆除老城区张掖宾馆建设大佛寺文化广场,由张掖城投集团在张掖滨河新区规划建设的一家山水园林式酒店。





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	MIN Zhe, Shandong University			
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