第44届中国控制会议

The 44th Chinese Control Conference (CCC2025)

大会专题研讨

Plenary Panel Session

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Modeling and Control of Soft Robots: Opportunities and Challenges

软体机器人建模与控制—机遇与挑战

Chair: Prof. Min Wu,
China University of Geosciences, China

Prof. Guoying Gu

Shanghai Jiao Tong University, China

- He was a Humboldt Fellow at the University of Oldenburg, Germany, and has been a Visiting Scholar at the Massachusetts Institute of Technology (MIT), the National University of Singapore, and Concordia University.
- He has received prestigious awards such as the National Science Fund for Distinguished Young Scholars and the XPLORER Prize.
- He serves as Associate Editor of the journal Soft Robotics and has previously served as Associate Editor for IEEE Transactions on Robotics and IEEE Robotics and Automation Letters.
- Research interests include soft robotics, bioinspired and wearable robots, and smart materials for sensing, actuation, and motion control.

Prof. Li Wen

Beihang University, China

- He is currently a full professor and the vice dean of Department of Mechanical Engineering and Automation, Beihang University.
- He received the Distinguished Scholar Award from the National Science Foundation of China in 2024.
- He serves as editorial board member of Science Robotics, IEEE TRO, and IJRR.
- His representative work has been featured in leading scientific media, including Nature, Science, MIT Technology Review, and BBC.
- He has received numerous accolades, including the Steven Vogel Young Investigator Award and the Xiong Youlun Young Scientist Award in 2020.
- Research interests include bio-robotics, soft robotics, and robotic intelligence.

Prof. Tian-Tian Xu

Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences

- She has received several honors, including the NSFC Excellent Young Scholar Award in 2020, the Best Application Paper Award at IROS 2019, and the Second Prize of the Wu Wenjun Natural Science of Artificial Intelligence Award in 2021 as the first author, as well as the CAA Young Scientist Award.
- She serves as an Associate Editor for IEEE Transactions on Robotics (TRO), IEEE Transactions on Mechatronics (TMECH), and IEEE Transactions on Automation Science and Engineering (TASE).
- Research interests focus on magnetic-controlled microrobot navigation, multimodal movement of microrobots, soft film-based microrobots, cooperative control of robots, and continuum soft surgical robots.

Prof. Huichan Zhao

Tsinghua University, China

- She has received numerous honors, including being named in Forbes China's 30 Under 30 in 2018 and MIT Technology Review's Innovators Under 35 China in 2020.
- She was awarded the Xiong Youlun Zhihu Excellent Young Scientist Award and The Alibaba Damo Academy Young Fellow Award in 2021.
- She served as an Associate Editor for IEEE Transactions on Robotics (T-RO) from 2021 to 2024 and currently serves as an Editor for T-RO.
- Research interests include soft robotics, bioinspired robotics, smart materials, flexible sensors and actuators, and human-robot interaction.

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Panelists: Prof. Guoying Gu, Shanghai Jiao Tong University, China

Prof. Li Wen, Beihang University, China

Prof. Tiantian Xu, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences

Prof. Huichan Zhao, Tsinghua University, China

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中国自动化学会 / Chinese Association of Automation

中国系统工程学会 / Systems Engineering Society of China

承办单位 / Host：重庆大学 / Chongqing University

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