



ICIRA 2023 Special Session Proposal

Title of the Proposal: Multimodal Collaborative Perception and Fusion

Technical Outline of the Session and Topics:

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Multimodal collaborative perception is based on neurophysiological signals, tactile sensation, motor behavior, and other multimodal information sharing, which means information complementary, stability, and security. This evolving field of research is focused on solving the ability of intelligent sensing systems to perceive and understand the multi-source modality information, and have been applied in various disciplines, especially in intention recognition, intelligent rehabilitation, and human-machine interaction. All contributions covering either theoretical development or practical applications are welcome.

Topics of the Session:

- *Multi-source sensing signal processing and detection*
- *Multimodal collaborative perception*
- *Multimodal intelligent human-machine interaction and fusion*
- *Pattern recognition*
- *Cognitive simulation, computing, and artificial intelligence*
- *Hybrid brain-machine interface*
- *Neuromuscular control and sensory feedback*

Contact details of the Session Organizers

- *Organizer 1: Yixuan Sheng, Harbin Institute of Technology, Shenzhen, shengyixuan@hit.edu.cn*
- *Organizer 2: Xincheng Yang, Swiss Federal Institute of Technology Lausanne, xingchen.yang@epfl.ch*
- *Organizer 3: Jinbiao Liu, Zhejianglab, liujinbiao1518@zhejianglab.com*
- *Organizer 4: Naoyuki Kubota, Tokyo Metropolitan University, kubota@tmu.ac.jp*
- *Organizer 5: Fan Xu, Shanghai Jiao Tong University, xufan_1993@sjtu.edu.cn*