



ICIRA 2024 Special Session Proposal

Title of the Proposal: Human-machine Co-adaptive Interface

Technical Outline of the Session and Topics:

Outline of the Session:

This session aims to present new human-machine co-adaptive interface to improve interaction performance from the perspective of both the user and the machine (robot) by introducing the advanced system, intellectual techniques and control strategies. The evolving field of research is focused on fulfilling the objective of assist-as-needed and mutual learning process to adapt to a variety of interaction scenarios, and has been applied in various disciplines, especially in robot-assisted rehabilitation, brain/muscle-computer interface, physiological intention perception, wearable intelligent system, etc. All contributions covering either theoretical development or practical applications are welcome.

Topics of the Session:

- *Cooperation control*
- *Human-machine Interaction*
- *Intelligent wearable technology*
- *Pattern recognition*
- *Assisted rehabilitation*

Contact details of the Session Organizers

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