



ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

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Special Session on

Advances of Assistive Technologies in the Real World

Organized and co-chaired by:

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Call for Papers

Technical Outline of the Session and Topics:

Human-assistive technologies are in high demand for overcoming the challenges. However, many reports have presented only concepts or technical achievements in laboratory rather than describing the evaluation of these technologies in actual use. There is a reason for this tendency; if we want to discuss technologies in the real world, we will have many difficulties. These studies will require complex procedures, for example, collaboration with people from different fields, such as doctors and physical therapists, clearing safety reviews and implementation of informed consent. Passing this will lead to many benefits. Through demonstrations in the actual situation, we sometimes find technical problems that go unnoticed in the laboratory. Furthermore, the people we are actually trying to help can provide important feedback. Thus, the organizers propose a special session to discuss some case studies considering human-assistive technologies in the “real world.” Our goal is to share many findings concerning real-world problems through real voices of actual situation and promote each study on human-assistive technology.

Topics of the Session include, but are not limited to:

- Bio-signal processing and understanding
- Assistive robots and service robots
- Human strength estimation in real time
- Interaction modelling for human and robot
- Intelligent control
- Real-time and bio-inspired feedback
- Real-time system for remote-operated fleet excavators
- Robotic exoskeleton
- User-friendly interface
- Virtual, augmented, and mixed-reality system



Author's schedule:

Deadline for submission of special session papers

April 15, 2024

Notification of acceptance

June 10, 2024

Deadline for submission of final manuscript

July 01, 2024

Early submission is highly encouraged for early decision notifications!



All the instructions for paper submission are included in the conference website:

www.iecon-2024.org