

ICIRA 2023 Special Session Proposal

Title of the Proposal: Vision-Based Human Robot Interaction and Application

Technical Outline of the Session and Topics:

Outline of the Session:

Vision-based Human-Robot Interaction (HRI) plays a vital role in intelligent robotics perception and cognition for its non-contact and natural performance, which is widely applied to industry, environment perception, medical diagnosis, etc. To develop robust HRI, fundamental research continues to emerge, investigating novel approaches of behavior *analysis*, object segmentation, scene understanding, and learning from experts' experiences. Due to the boom of deep learning, along with rapid advances of high-performance computing, the vision-based HRI has made great progress in both theory and application. This special session will bring together researchers, sharing the latest technological achievements and deliberating joint opportunities in the field of vision-based HRI.

Topics of the Session:

- Human behavior analysis
- Environment perception
- *Intelligent interactive robot*
- *Visual diagnosis and treatment robot*
- Industrial visual inspection
- Driver monitoring system
- HRI in virtual reality
- *Adaptive human-robot interaction*

Contact details of the Session Organizers

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