

Special Session for Mechatronics2018

(1) Session title

High Sensing Application for Human Assistive Systems

(2) Session description (about 200 words).

The recent advances of vision-based sensing technology make it possible to contribute to not only the developments of intelligent perceptions but new innovative functions in future human assistive applications. The sensory factors may involve broad functions in system integrations, and therefore the session specially focuses on human assistive systems. This session aims to discuss new trends of high sensing applications for emerging system functions, mobility and robotics. Topics of interest include, but are not limited to:

- 1) Innovative Sensing Instruments
- 2) Sensor-based Assistive Control for Robotic Systems
- 3) Sensor -based Human Assistive Applications/Devices
- 4) Sensing using Point Cloud
- 5) Signal Processing for Sensing System
- 6) Human-Machine Interactions

(3) Session organizer(s) (name, affiliation, contact information)

Prof. Sota Shimizu, Shibaura Institute of Technology

Prof. Hiroshi Igarashi, Tokyo Denki University

Prof. Naoki Oda, Chitose Science and Technology University

Prof. Toshi Murakami, Keio University