ICIT 2023

The 24th IEEE International Conference on Industrial Technology

Orlando FL, USA | 4 - 6 April, 2023

ICIT 2023 Special Session Proposal

Title of the Proposal: Human-centered Control Systems and Mechatronics

Technical Outline of the Session and Topics:

Outline of the Session:

This technical track focuses on cutting-edge theory, technology, and practice for control systems and mechatronics as well as their integration from the viewpoint of human factors. It provides a platform to present new results and recent research activities. We are particularly interested in fostering the exchange of concepts, prototypes, research ideas, and other results which could contribute to academic fields and also benefit business and the industrial community.

Topics of the Session:

- *Active and passive disturbance rejection*
- *Advanced control theory*
- *AI-based control*
- *Assistive Robots*
- *Autonomous mobile robot*
- *Complex systems control*
- *Distributed collaborative systems*
- *Estimation and identification technology*
- *Human-robot interface*
- *Industrial control applications*
- *Intelligent transportation*
- *Mechatronic systems*
- *Multi-agent system*
- *Human factors*
- *Humanoid robots*
- *Networked system and control*
- *Nonlinear and adaptive control*

- *Optimal and robust control*
- *Robotics*
- *Security & safety applications*
- *Vision-based control*

IEEE IES Technical Committee Sponsoring the Special Session (if any):

TC of Human Factors

Short bio and contact details of the Session Organizers

- *Prof. Daisuke Chugo:* A professor at Kwansei Gakuin University. His research interests include Human System interaction, Assistive System, and Device, Robotics. He is the Chair of Technical Committee on Human Factors.
- *Prof. Sho Yokota:* A professor at Toyo University. His research interests include Human System interaction, Assistive System and Device, and Robotics. He is the Vice-chair of Technical Committee on Human Factors.
- *Prof. Jinhua She:* A professor at Tokyo University of Technology, Tokyo, Japan. His research interests include the applications of control theory, repetitive control, active disturbance rejection, process control, and assistive robotics. He has published more than 300 journal papers. His work has been cited more than 14,000 times.