

# Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

## Special Session on

“Advances in Human-Mechatronic Systems”

### Organized by

Principal Organizer: Sho Yokota (s-yokota@toyo.jp)  
Affiliation: Toyo Univ., Japan

Organizer 1: Daisuke Chugo (chugo@kwansei.ac.jp)  
Affiliation: Kwansei Gakuin Univ., Japan

Organizer 2: Mihoko Niitsuma(niitsuma@mech.chuo-u.ac.jp),  
Affiliation: Chuo University, Japan

Organizer 3: Gabor Sziebig (gabor.sziebig@uit.no)  
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## Call for Papers

Theme:

Along with the rapid progress in the fields of human factors and mechatronics, the importance of human factors in the development and operation of mechatronic systems has been widely recognized. This special session provides people a platform to present their new research results, and to discuss the state-of-the-art research topics and challenges in the related fields with broad interest. Contributors are welcome to submit their papers to this special session including human factors theory, robotics, mechatronics, behavioural and social sciences, design, health, human-computer interaction, artificial intelligence, haptics, etc

Topics of interest include, but are not limited to:

- AI
- approaches to standardizing display and control of technologies
- biological control
- human-agent teaming
- perceptual and cognitive abilities of robots
- prediction of mechatronic behaviour
- real-world implications for human-robot interaction
- open possibilities for use of robots, where it was not common before
- develop module driven robots

- synthetic vision systems,
- system reliability

Principal Organizer: Prof. Dasisuke Chugo, IEEE IES member

Daisuke Chugo, Vice Chair of Technical Committee on Human Factors, received his Ph.D. degrees in engineering from Saitama University, Japan in 2005. He is currently a professor of the School of Science and Technology, Kwansai Gakuin University, Japan, and is a steering committee member of CLAWAR conference. Dr Chugo served as Local General Chair of The IEEE 24th International Symposium on Robot and Human Interactive Communication (RO-MAN 2015), and has experiences of organizers and SS proposers in the conferences of ICIT 2016/2018, ISIE 2017/2018/2019, HSI 2018, etc.

Principal Organizer: Prof. Sho Yokota, IEEE IES member



Sho Yokota is the Vice Chair of Technical Committee on Human Factors. He received "Docteur en Robotique" from Université de Versailles Saint-Quentin-en-Yvelines, Versailles, France, in 2009. He has experiences of organizers and SS proposers in the conferences of IECON, ICIT, ISIE, INDIN, HSI, etc. He is currently an associate professor of the Department of Mechanical Engineering, Toyo University, Japan.

Organizer 1: Prof. Dasisuke Chugo, IEEE IES member



Daisuke Chugo, Vice Chair of Technical Committee on Human Factors, received his Ph.D. degrees in engineering from Saitama University, Japan in 2005. He is currently a professor of the School of Science and Technology, Kwansai Gakuin University, Japan, and is a steering committee member of CLAWAR conference. Dr Chugo served as Local General Chair of The IEEE 24th International Symposium on Robot and Human Interactive Communication (RO-MAN 2015), and has experiences of organizers and SS proposers in the conferences of ICIT 2016/2018, ISIE 2017/2018/2019, HSI 2018, etc.

Organizer 2: Prof. Mihoko Niitsuma, IEEE IES member



Mihoko Niitsuma, Chuo University, IEEE IES member, Associate Professor at the Department of Precision Mechanics. Her research interests include assistive robotics, human-robot communication, human interface. She is an IES AdCom member and the vice-chair of Technical Committee on Control, Robotics, and Mechatronics.

Organizer 3: Prof. Gabor Sziebig, IEEE IES member



Gabor Sziebig, UiT The Arctic University of Norway, IEEE IES member, Associate Professor at the Department of Industrial Engineering. His research interests include Robotics and Automation, Computer and Robot Vision, Control and Manufacturing Automation. He is the chair of Technical Committee on Control, Robotics, and Mechatronics.

**Submissions Procedure:** All the instructions for paper submission are included in the conference website: <https://attend.ieee.org/iecon-2021/>

## Deadlines:

Full paper submission:	June 25, 2021
Paper acceptance notification:	July 30, 2021
Camera-ready paper submission:	Aug. 27, 2021

## Reviewers

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

Human Factors  
Control, Robotics, and Mechatronics