**A Special session proposal
for The IEEE International Conference on Robot and Human Interactive
Communication (IEEE RO-MAN 2023)**
Paradise Hotel, Busan, South Korea, August 28-31, 2023

Title

Social Human-Robot Interaction of Human-care Service Robots

Aims and Scope

Service robots with social intelligence are starting to be integrated into our everyday lives. The robots are intended to help improve aspects of quality of life as well as improve efficiency. We are organizing an exciting special session at RO-MAN 2023 that is oriented towards sharing the ideas amongst participants with diverse backgrounds ranging from Human-Robot Interaction design, social intelligence, decision making, social psychology and aspects, and robotic social skills. The purpose of this special session is to explore how social robots can interact with humans socially and facilitate the integration of service robots. This special session focuses on three social aspects of human-robot interaction: (1) technical implementation of social robots and products, (2) form, function and behavior, and (3) human behavior and expectations as a means to understand the social aspects of interacting with these robots and products. This special session is supported by Korea Robotics Society (KROS), one of technical sponsors of RO-MAN 2023. (A supporting letter attached)

List of Topics

This special session will focus on the current advances in the area of social Human-Robot Interaction, social intelligence, social skills, and their applications including clinical evaluations. Papers are solicited on all areas directly related to these topics, including but not limited to:
 • *Social perception and context awareness*
 • *Short/long-term behavior recognition*
 • *Social expression and interactive behavior*
 • *Social task modelling and management*
 • *Social grasping and navigation skills*
 • *Social humanoid robot design*
 • *Human-robot interaction design*
 • *Emotion recognition and model design*
 • *Dialogue based interaction*
 • *User evaluation*
 • *Applications such as healthcare, receptionist, education*

List of Tentative Speakers

The intended audience primarily consists of social robotics, artificial intelligence, and HRI researchers and developers; however, it also includes researchers and industrial partners from communities such as industrial-, field- and space-robotics. We will run our special session webpage, and advertise our special session. We will post a call for paper to researchers and developers in this area to ask them to participate in this special session.
Candidate speakers and the topic for each speaker are as follows (not yet confirmed):
  - *Gustav Eje Henter (KTH Royal Institute of Technology, Holland) on Social Gesture Generation (Invited Talk)*
  - *Francesco Ferro (PAL Robotics, Spain) on Social Humanoid Robots*
  - *Silvia Rossi (Università degli Studi di Napoli Federico II, Italy) on Personalized Social Robot Services*
  - *Heng Zhang (ENSTA, France) on Socially Semantic Expression Generation*
  - *Ho Seok Ahn (The University of Auckland, New Zealand) on Personality Traits and User Engagement*

Organizers

Ho Seok Ahn *(hs.ahn@auckland.ac.nz)*
Senior Lecturer, Electrical, Computer and Software Engineering, The University of Auckland
  - *Past Chair, IEEE New Zealand North (Chair in 2019-2020)*
  - *Co-Chair, R&A Joint-Chapter, IEEE New Zealand*
  - *Workshop Chair, RO-MAN 2019*
  - *Registration Chair, HRI 2019*
  - *Publicity Co-Chair, ICSR 2018*
  - *Local Arrangement Co-Chair, HRI 2016*
  - *Workshop Organizer, HRI 2019, HRI 2018, ICSR 2018, ICSR 2017, ICSR 2014*
  - *Special Session Organizer, RO-MAN 2019, RO-MAN 2018, UR 2018, IROS2016, RO-MAN 2015, RAM 2015, ICSR 2014, RAM 2013*

Minsu Jang *(minsu@etri.re.kr)*
Principal Researcher, Intelligent Robotics Research Division,
Electronics and Telecommunications Research Institute (ETRI)
Professor, Division of Artificial Intelligence, Korea University of Science and Technology (UST)
  - *Publicity Co-Chair, RO-MAN 2022*
  - *Publication Co-Chair, RO-MAN 2023*
  - *Workshop Organizer, ICSR 2021, IROS 2020, RO-MAN 2020, HRI 2018-2019, ICSR 2018*
  - *Special Session Organizer, RO-MAN 2021-2022, RO-MAN 2018-2019, UR 2018*

Jongsuk Choi *(cjs@kist.re.kr)*
Head, Principal Research Scientist, Center for Intelligent and Interactive Robotics,
Korea Institute of Science and Technology (KIST)
Professor, Division of Nano & Information Technology, Korea University of Science and Technology (UST)
  - *General Chair, RO-MAN 2023*

- *Steering Committee, HRI (2017~2020)*
- *Financial Chair, HRI 2019*
- *Associate Editor, ICRA 2018*
- *Organized Session Chair, ICCAS 2016*
- *Organized Session Chair, RO-MAN 2013*

Dong-Wook Lee *(dwlee@kitech.re.kr)*
Principal Researcher, Robotics R&D Department, KITECH
Korea Institute of Industrial Technology (KITECH)
Professor, Division of Robotics, Korea University of Science and Technology (UST)
- *Research interests include android robots, social robots, and artificial emotion systems*

Jaehong Kim *(jhkim504@etri.re.kr)*
Director, Principal Researcher, Intelligent Robotics Research Division, Electronics and Telecommunications Research Institute (ETRI)
- *Workshop Organizer, ICSR 2021*
- *Special Session Organizer, RO-MAN 2021*
- *Industry Chair, URAI 2017*
- *Exhibition Chair, RO-MAN 2013*
- *Video/Poster Chair, URAI 2012*

Yoonseob Lim *(yslim@kist.re.kr)*
Principal Researcher, Center for Intelligent and Interactive Robotics, Korea Institute of Science and Technology (KIST)
Adjunct Professor, Department of HY-KIST Bio-convergence, Hanyang University
- *Registration Chair, RO-MAN 2023*
- *Registration Chair, HRI 2019*
- *Workshop Organizer, HRI 2018, ICSR 2017*

03/01/2023

Dear RO-MAN 2023 Special Session and Program Chairs,

It is our pleasure to state the full support of the KROS to the Special Session entitled "Social Human-Robot Interaction of Human-Care Service Robots" authored by Ho Seok Ahn, Minsu Jang, Jongsuk Choi, Jaehong Kim, Dongwook Lee and Yoonseob Lim.

Yours Sincerely,

Nak Young Chong

President of KROS