Title: Transparency and Trust in Human-Robot Interaction

(Please, remember to use code **7ys83** to submit a paper to this Special Session)

Objectives and Motivation

This Session will focus on the impact of robot transparency on human users trust of robot in health-care environments. We aim to explore difference aspects of Human-Robot Interaction that can affect, enhance, undermine and recovery of humans trust in robots, such as behaviour transparency (goals and actions). In particular, this session will bring together leading researchers in the fields to share and discuss ideas and findings to guide the design and development of robots that human users would accept and trust.

List of Topics

Topics of interest include, but are not limited to, the following:

- Impact of Transparency on Trust in Human-Robot Interaction;
- Measuring Trust in Human-Robot Interaction;
- Trust Violation and Recovery Mechanism in HRI;
- Explainable AI (XAI) in Health-care robotics;
- Trust and Assistive Robotics;
- Enhanching Humans Trust in Robots

Corresponding Keywords

trust, robot transparency, assistive robotics, Health-care robotics,
trust and XAI, companion robot.

Organizers

1. Alessandra Rossi, University of Hertfordshire, Address College Lane, University of Hertfordshire, Hatfield, AL109AB, Hertfordshire, UK, a.rossi@herts.ac.uk

She is a currently a Marie Sklodowska-Curie (ITN-ETN) PhD fellow at the School of Computer Science, University of Hertfordshire (UH), United Kingdom, under the supervision of Prof. Dr. Kerstin Dautenhahn. She received her B.Sc. and M.Sc. degrees in Computer Science from the University of Naples "Federico II", and her M.Sc. degrees thesis is entitled "Human Multirobot Interaction in Robot and Group Selection Tasks". Her research interests include Multi-agent Systems, Social Robotics, Human-(Multi)Robot Interaction and User Profiling. She is active member of UH Robocup team Bold Hearts.

2. Silvia Rossi, Dipartimento di Ingegneria Elettrica e Tecnologie dell'Informazione - DIETI, University of Naples "Federico II", Italy, Address Strada Vicinale Cupa Cintia, 21, 80126 Napoli NA, Italy, silrossi@unina.it

She received the M.Sc. degree in Physics from University of Naples Federico II, Italy, in 2001, and the Ph.D. in Information and Communication Technologies from the University of Trento, Italy, in 2006.

She has been research assistant at the Division on Cognitive and Communication Technologies - ITC-irst (Italy), at the institute of Cybernetics E. Caianiello - CNR (Italy), and visiting researcher at the Center for Human-Computer Communication - Oregon Health and Science University, Oregon (USA). Her research interests include Multi-agent Systems, Human-Robot Interaction, Cognitive Architectures and Behavior-based Robotics and User Profiling and Recommender Systems.

Co-organisers

3. Alan Wagner, Georgia Tech Research Institute, Atlanta, GA, USA, alan.wagner@gtri.gatech.edu

He is currently a senior research scientist at Georgia Tech Research Institute working in the Aerospace, Transportation and
Advanced Systems Laboratory. Previously He was a graduate student studying under Dr. Ron Arkin as part of the Mobile Robot Lab within the College of Computing. His research focuses on developing the theoretical underpinnings necessary for human-robot social relations. His goal is to build robots that can not only interact with humans, but are also capable of representing, reasoning, and developing relationships with others.

4. Chung Hyuk Park, George Washington University, Washington, DC, USA, chpark@gwu.edu

Chung Hyuk Park□s Assistive Robotics and Tele-Medicine (ART-Med) Lab studies the collaborative innovation between human
intelligence and robotic technology, integrating machine learning, computer vision, haptics, and telepresence robotics. The current and future research topics are focused on the following three main themes: multi-modal human-robot interaction and robotic assistance for individuals with disabilities or special needs, robotic learning and humanized intelligence, and tele-medical robotic assistance. He explores novel methodologies for utilizing robotic systems in biomedical applications, from simple care-giving tasks towards intelligent surgical assistance systems.