A Workshop proposal for the

IEEE International Symposium on Robot and Human Interactive Communication (IEEE RO-MAN 2016)

New York, USA, August 26-31, 2016.

Title
Workshop on Behavior Adaptation, Interaction and Learning for Assistive Robotics – BAILAR

Format
Half day Workshop

Main organiser
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Motivation and Objective
With robots getting out of the cages, Human-Robot Interaction applications effectiveness has not only to rely on the skills of trained users, but also on the ability of the robot to adapt to the users' behaviour and needs as well. In particular, the development of personal robots, as assistive technological tools, challenges researchers to develop socially intelligent and adaptive robots that can collaborate with people.

Personal robots are expected to incrementally learn user preferences and to modify and adapt their behaviours accordingly. Indeed, for improved and natural human-robot cooperation, human users will learn how to interact with the robot but, at the time, the robotic systems should adapt to the users. This adaptation requires learning a model of human behaviour and integrating this model into the decision-making algorithm of the robot. Creating robotic systems capable of correctly model and recognize the human behavior and of adapting their behavior to the user is a very critical task, especially in the domain of assistive robotics and when working with vulnerable user populations.

Intended Audience
This workshop is intended as a forum for a broad audience, which spans from machine learning to user profiling and robot behavior control, and it is a place to exchange opinions, to discuss innovative ideas and to get hints and suggestions on ongoing researches.

List of Topics
Assistive Robotics, User Profiling, Adaptive Behaviour, Activity Recognition, Intention Recognition, Multi-sensor fusion, Ambient Assisted Living, HRI and Personalization, Proxemics, Learning, Adaptive Planning.

Keynote Speakers
To be announced
We are planning to have two different keynote speakers coming from different communities.

Paper Guidelines
We welcome prospective participants to submit either full papers (up to 6 pages) or extended abstracts (up to 2 pages). Papers can be on research that the authors have already conducted, but we especially encourage papers on new ideas or research that the authors plan to conduct.

The manuscripts should use the IEEE RO-MAN two-column format. Please submit a PDF copy of your manuscript through EasyChair (coming soon). Each paper will receive a minimum of two reviews. Accepted papers require that at least one of the authors register to the workshop.

Authors of unpublished papers will be invited to submit an extended version of the papers on a special issue on Pattern Recognition Letters Journal (pending).

Important Dates
To be announced

Community Members (TBC)
Amedeo Cesta, *Istituto di Scienze e Tecnologie della Cognizione - CNR (Italy)*
Ryad Chellali, *Nanjing University of Technology (China)*
Kerstin Dautenhahn, *Adaptive Systems Research Group, University of Hertfordshire (UK)*
Diego Resende Faria, *Institute of Systems and Robotics, University of Coimbra (Portugal)*
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Mehdi Khamassi, *Institut des Systèmes Intelligents et de Robotique, UPMC (France)*
Dongheui Lee, *Technische Universität München (Germany)*
Alessandra Rossi, *Adaptive Systems Research Group, University of Hertfordshire (UK)*
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