The 3rd Workshop on Public Space Human-Robot Interaction (PubRob 2016)

Workshop website: `http://pubrob2016.pubrob.org/`

The development of robots capable of interacting with humans has made tremendous progress in the last decade, leading to an expectation that in the near future, robots will be increasingly deployed in public spaces, for example as receptionists, shop assistants, waiters, or bartenders. In these scenarios, robots must necessarily deal with situations that require socially appropriate human-robot interactions of a specific nature: interactions that are short and dynamic, and where the robot has to be able to deal with multiple persons at once. In order to do so, robots typically require specific skills, including robust video and audio processing, fast reasoning and decision making mechanisms, and natural and safe output path planning algorithms. As a result, research on public space robots is often fundamentally different from other work in social robotics and HRI, which often focuses on long-term robot companions who interact with humans in one-on-one interactions.

This workshop aims to bring together researchers from diverse disciplines, in order to explore this research area from different perspectives. To allow for full and productive discussion among all participants, the workshop will include an extended afternoon session using the Open Space meeting format.

Prospective workshop participants will be encouraged to submit a short abstract (max. 2 pages) outlining their work in this area. Abstracts will be reviewed by the programme committee for relevance and accepted abstracts will be presented at the workshop during a lightning talk session. Students will be particularly encouraged to submit position papers and participate in the lightning session as a means for getting feedback on their research from the community. Accepted abstracts will also form the proceedings for the workshop and be posted on the workshop website.

This workshop builds on three previous meetings in the area of multimodal, multi-party human-robot interaction: a tutorial at the International Conference on Social Robotics (ICSR) 2011 entitled *Joint action for social robotics: how to build a robot that works together with several humans*, a workshop at ICSR 2013 on the topic of *Robots in public spaces: towards multi-party, short-term, dynamic human-robot interaction*, and a workshop at ICMI 2014 on the topic of *Multimodal, multi-party, real-world human-robot interaction*. The previous events addressed this research area from the perspective of social human-robot interaction and multimodal robot capabilities required to support interaction in this context. These events are all part of the Workshop and Tutorial Series on Public Space Human-Robot Interaction (PubRob, `http://www.pubrob.org/`). For this workshop, we continue the theme but focus on succesful social collaboration as basis for successful human-robot collaboration.