

The 1st International Workshop on Affective Computing for Social Robotics (ACSR)
at RO-MAN 2016

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Social Robots are expected to act as mediators to elicit more active communication and provide life support for humans. Social robots have found a number of applications in many aspects of our daily life, including, but not limited to, elderly care, therapeutic and educational purposes (e.g. therapy for children with autism), entertainment and so on. As the critical role for robots here is to interact with and assist humans in their every-day activities, the goal is to endow them with 'social intelligence'. This, in turn, would allow them to simulate the human-human interaction and communication by being more engaging and sensitive to our affective states (such as emotional states).

Considering a wide variety of users, the robots should be capable of deciding what kind of services they provide. The accurate and autonomous evaluation is needed through the technology (without human operator intervention), especially if the users who are children or people with special needs. For this "user-centred" human-robot interaction, this requires that the social robots can learn the user's emotional states and be able to respond to it accordingly.

Advances in the affective computing field have recently allowed us to measure humans' affective states such as emotions, empathy and engagement from different modalities. These include audio (verbal and non-verbal vocalizations), visual (body posture and facial expressions) and physiological (heart rate and electrodermal activity) signals. While advanced modelling techniques based on computer vision and machine learning have been proposed so far to analyse human behaviour using these modalities, a little attention has been paid to analysis of affect from naturalistic behaviours as expressed in human-robot interactions (HRI).

The main aim of this workshop is to bring together researchers working in Social Robotics and Affective Computing, and exploit jointly the most recent advances in these two fields. The workshop is oriented towards sharing the ideas of participants with diverse background ranging from robotics, machine learning, computer vision and social psychology. The goal is to facilitate the integration of social robotics and affective computing as an emerging field. In particular, the goal of the workshop is to identify new challenges in designing and learning of social robots that are affect-sensitive.

The intended audience are researchers working in the multidisciplinary area of HRI, including social robotics, affective computing, and behavioural experts from psychology and social sciences. The participants should submit full papers (up to 6 pages). The papers will undergo a peer-review process and will be reviewed by at least two reviewers. The accepted papers will be invited for an oral presentation or a poster presentation at the Workshop.