



Editorial

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For this issue, we are honored to introduce a collection of ten papers which cover a wide range of exciting topics in social robotics:

The first work “Can Using Pointing Gestures Encourage Children to Ask Questions?” (by Tsuyoshi Komatsubara, Masahiro Shiomi, Takayuki Kanda and Hiroshi Ishiguro) hypothesized that a robot’s capability to perceive pointing gestures will encourage children to ask more questions. The authors experimentally verified this hypothesis with the Wizard-of-Oz technique with 92 elementary-school students who interacted with a robot in a situation where it served as a guide who explains a museum exhibit.

The second paper “Model of Side-by-Side Walking Without the Robot Knowing the Goal” (by Deneth Karunarathne, Yoichi Morales, Takayuki Kanda and Hiroshi Ishiguro) proposes a model to enable a robot to switch between two interaction modes; in one mode, it strictly maintains the side-by-side walking formation, and in another it walks slightly behind its partner. The authors have conducted an evaluation experiment and revealed that the model replicates human side-by-side walking better than other simple methods.

The third work on “A Robot that Distributes Flyers to Pedestrians in a Shopping Mall” (by Chao Shi, Satoru Satake, Takayuki Kanda and Hiroshi Ishiguro) reports the research on developing a robot that distributes flyers to pedestrians. The authors analyzed peoples distributing behavior in a real shopping mall, developed a behavior model of the robots behavior, implemented it in a humanoid robot, and confirmed its effectiveness in a field experiment.

The fourth paper ““I Know That Now, I’m Going to Learn This Next” Promoting Self-regulated Learning with a Robotic Tutor” (by Aidan Jones, Susan Bull and Ginevra

Castellano) explores how personalised tutoring by a robot achieved using an open learner model (OLM) promotes SRL processes and how this can impact learning. It is shown that when a robotic tutor personalises and adaptively scaffolds SRL behaviour based upon an OLM, greater indication of SRL behaviour and increased learning gain can be observed over control conditions.

The fifth work is “The More the Merrier? Effects of Humanlike Learning Abilities on Humans’ Perception and Evaluation of a Robot” by Astrid M. Rosenthal-von der Pütten and Jens Hoefinghoff. The authors have conducted three experimental studies in which subjects trained a robot to do a card game via reinforcement learning, and the results show that the implementation of a learning algorithm had positive effects regarding the evaluation of the robot, its learning abilities and the interaction.

The sixth paper is “Affective Touch in Human–Robot Interaction: Conveying Emotion to the Nao Robot” by Rebecca Andreasson, Beatrice Alenljung, Erik Billing and Robert Lowe. The authors present the first HRI study of tactile conveyance of both positive and negative emotions (affective touch) on the Nao robot, and based on an experimental set-up from a study of human–human tactile communication. The results show high agreement with those reported for human–human affective tactile communication.

The seventh paper, “Social Acceptance of Robots in Different Occupational Fields: A Systematic Literature Review” (by Nina Savela, Tuuli Turja and Atte Oksanen), aims to examine how the social acceptance of robots in different occupational fields has been studied and what kinds of attitudes the studies have discovered regarding robots as workers. Forty-two preliminary search results were selected to the final research through inclusion criteria, and it is implied that attitudes toward robots are positive in many fields of work.

In the eighth paper, “Public Acceptance of Fundamental Rights via a Telepresence Robot and a Video Call Stand in South Korea” (by Ilhan Bae), the author have compared public acceptance of remote operators and the results show that a remote operator with physical control on a technical medi-

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ation has more potentials to evolve into legal persons with greater fundamental rights in a local environment.

In the following paper, “Here Comes the Bad News: Doctor Robot Taking Over” (by Johan F. Hoorn and Sonja D. Winter), the authors have manipulated how a bad health message is framed and the language that is used to test in how far the Media Equation and Computers Are Social Actors (CASA) validly explain user responses to social robots. It is concluded that both Media Equation and CASA need to be altered when it comes to robot communication and robots sometimes outperform humans on emotional tasks.

The last paper, “SPRinT: A Mixed Approach to a Hand-Held Robot Interface for Telepresence” (by Jonggil Ahn and Gerard Jounghyun Kim) presents SPRinT, a control interface design for a telepresence robot that uses only a smart phone without any external sensors. The mixed approach (body/motion based for rotation and touch based for translation) proved to offer a good middle ground since the interaction method was familiar and easy to use with a reasonable level of telepresence.

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