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Editorial

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In this issue, we are honored to present a collection of twenty papers which cover a wide range of exciting topics that weave social robots more closely into the fabric of society.

In the first paper the authors assess the effect of wheel height and weight on people's affordance judgements of a wheeled robot climbing a step within two experiments. This research provides evidence that participants can be sensitive to affordances for non-human actors and might use kinematics when perceiving them. The results indicate that robot users may benefit from viewing a robot's appearance and movements when judging a robot's affordances.

The second paper concerns experiments conducted with children regarding general and pedagogical considerations on the role of robots used in preschool childcare. Based on this study the authors discuss some relevant aspects that have barely been addressed in an explicit way in current cHRI research, four areas are analyzed and key ethical issues are identified in each area.

In the third paper the authors present the analysis of attention skills in children with cognitive impairments over a series of child–robot interaction sessions. Their findings indicate that the majority of the children showed an improvement in attention, and most of the children displayed positive engagement towards the robot. The positive response suggests that the robot, via child–robot interaction, could be a useful and engaging tool to improve attention skills of children with cognitive impairment.

The fourth article of this issue explores the benefits of the use of PD methods in the design of a social robot, with specific focus on their use in autism spectrum disorders therapies on the Colombian autism community. The findings are summarized through a set of guidelines regarding the design of a social robot-device suitable to be implemented for robot-assisted therapy for CwASD.

The fifth paper presents a study on the effects of different LoAs of a Socially Assistive Robot (SAR) on a user's evaluation of the system in an exercising scenario. The study's result provides empirical evidence for the relation between the LoA of a system, the user's perceived competence of the system, and the perceived alliance with it.

The sixth paper introduces a novel method, simplified Pain Matrix (PM), in which a PM is implemented to generate and activate various kinds of synthetic pain embedded into a robot framework with simplifications on some features of the Pain Matrix. Two scenarios of experiments are constructed and the results show a reliable outcome.

The seventh paper develops a framework of social mediation functions that robots could perform, motivated by the special social needs that people with health conditions have. Through thematically organizing and reviewing the existing literature on robots supporting human–human interactions, it is explained how the findings and design ideas from these studies can be applied to the functions identified in the framework.

The eighth paper provides insights into the different ways in which ancient societies and their religious traditions helped in the development of technological progress.

In the ninth paper a pilot study was conducted at a special needs school to examine the effect of robot KASPAR on making contact with children with autism. As a conclusion, KASPAR was able to make contact with the children and to catch and hold their attention longer and in a more focused manner than the teachers.

The tenth paper describes four different interaction styles which have been developed for the social robot Furhat, acting as a host in spoken conversation practice with two simultaneous language learners, based on interaction styles of human moderators of language cafés. The general findings were that Interviewer received the highest mean rating, but that different factors influenced the ratings substantially, indicating that the preference of individual participants

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needs to be anticipated in order to improve learner satisfaction with this practice.

The 11th paper proposes an approach based on a social humanoid robot that monitors indoor environmental quality. It interacts friendly with occupants providing appropriate suggestions. The proposed approach has been experimentally verified in some offices of the National Research Council of Italy located in Palermo, and it has involved ten participants.

The 12th paper investigates the interplay between trust in a robot and people's perceptions of the robot's emotional intelligence.

The 13th paper describes how the concept of technological frames was used to identify the nature of care robots, care robots in use and care robot strategy as shared group level assumptions, expectations and understandings of care robots among care staff and potential care receivers. The novelty of the results, and their relevance for science and practice, is derived from the theoretical framework which indicates that adoption of care robots will be dependent on how well societies succeed in collectively shaping congruent technological frames among different stakeholders and aligning technological developments accordingly.

The 14th paper provides initial findings examining whether fear of robots has a correlation with one aspect of quality of life, namely life satisfaction. After controlling for individual effects and country effects and using both standard ordinary least squares and a linear multilevel regression model, it was found fear of robots correlates with lower reported life satisfaction.

The 15th paper proposes a novel dialogue structure called experience-based dialogue to help a robot present and maintain a good interaction over the long term. This dialogue structure contains a piece of knowledge and a story about how the robot gained this knowledge, which are used to compose the robot's experience-related utterances for sharing experiences of interacting with previous users other than just the current user and help it present its internal aspects.

In the 16th paper the authors used a hugging robot that was previously developed and experimentally investigated its physical interactions related to encouraging interactions and self-disclosure with 48 participants. The results showed that reciprocated hugs increased the interaction times and encouraged more self-disclosure from the hugged participants than those who did not get reciprocated hugs.

In the 17th paper the present research studies the attribution of credit for success and attribution of blame for failure in a human–robot group. In the experiment, two participants of the same gender and a robot composed of a group that cooperated to solve the desert survival problem. The findings in this paper shed some light on the allocation of responsibility based on outcomes in human–robot groups.

The 18th paper examines the effects of robotics training on children's spatial ability and attitude toward STEM. According to the observation, the children's spatial visualization and mental rotation test scores were significantly increased at the end of the course. Moreover, the children's attitudes toward STEM were significantly improved. The results showed that educational robotics may improve children's spatial ability and attitudes toward STEM.

The 19th paper focuses on the applicability of deception as a means to support engagement and the attribution of rationality to playing robotic agents. By analyzing the interaction situation between the human and robot players, by identifying the need for deception, and by deciding whether and how to deceive, the authors aim at increasing self-reported engagement and fun, which are also related to the perception of the robotic opponent as smart enough to compete at an appropriate level.

In the last paper the authors describe how they found an interaction effect of prior emotions and (manipulated) coping potential on robot perceptions, but not the effects expected based on previous studies. An actual interaction with a robot thus seems to provoke different reactions to the robot, thereby overruling any emotional effects. These findings are discussed in the healthcare context in which these social robots might be deployed.

1 Announcement by Founding Editor-in-Chief

Shuzhi Sam Ge

Dear Friends and Colleagues of Social Robotics,

I would like to thank the community including the Members of International Advisory Board, Members of Editorial Board, Authors, Reviewers, Readers and Members of the Editorial Office for bringing into the world our brainchild, the *International Journal of Social Robotics*, in 2008, and for witnessing its first baby steps while we had no impact factor yet in the earlier years. Thank you, all of you, for your work ensuring strong growth in the period to follow, leading to the excellent impact factor of recent years, and for establishing the journal's position of leadership in the social robotics community which encompasses science, engineering, philosophy and arts. Congratulations for what we have achieved thus far together.

After 12 years of devotion, dedication, and love for Social Robotics, I hereby announce my stepping down as active Editor-in-Chief. I am pleased to share with you my heartfelt appreciation for your support, understanding and contributions to the community. I would like to personally thank every individual involved with social robotics, as each of you

plays a pivotal role in the building of our community. Without your contribution, the journal could not have become what it is today. Of course, we realize that the road to excellence is long. Not only do we want to sustain our present achievement, but also to increase it without any sacrifice in quality.

I am sure that the journal will reach new heights with the leadership of Agnieszka Wykowska and Oussama Khatib, while I will continue to serve as an Advisor and will remain involved with our community as the Founding Editor-in-Chief of the journal. Social robotics is still an emerging field and has much potential for growth yet. Let us stay committed and keep striving for excellence!

In the midst of COVID, I wish the members of community safety, health and happiness. To keep our community active, engaged, and competitive, on behalf of the organizing committee of our companion International Conference on Social Robotics (ICSR) 2021, I invite you to contribute to ICRS 2021 and hope to see you in Singapore face-to-face or online toward the end of the year. It is my great pleasure to play an instrumental role as a founding member in this process and to witness the growing importance of our field.

Finally I would like to welcome Serena Ivaldi joining Agnieszka Wykowska and Oussama Khatib as Editor in Chief, taking on part of the ever-increasing workload of our growing and flourishing journal. Please join us in wishing her academic and personal success and satisfaction in the task she is taking on.

Shuzhi Sam Ge