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Social Robotics

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Proceedings

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Preface

These proceedings contain the papers presented at 5th International Conference on Social Robotics (ICSR 2013), which was held in the city of Bristol, in the United Kingdom, during October 27th–29th, 2013. Three workshops as part of the conference took place on Sunday, 27 October 2013, while the conference presentations were held on Monday, 28 October 2013, and Tuesday, 29 October 2013.

The ICSR first assembled in 2009 at Incheon in Korea as part of the FIRA RoboWorld Congress. Since then, it has grown in size while maintaining its founding principle of bringing researchers together to report and discuss the latest progress in the field of social robotics in a collegial, supportive, and constructive atmosphere. The theme of the conference this year was “Companionship,” which was to both inspire interest in the emerging roles that robotic systems may play in our society in the near future, and to encourage researchers from a diverse range of backgrounds to engage with the conference. Toward this end, the conference attracted submissions from researchers with a broad range of interests, for example, human–robot interaction, child development, and care for the elderly. There were also a large number of submissions describing progress in the more technical issues that underlie social robotics, such as visual attention and processing, motor control and learning, emphasizing the fascinating cross-disciplinary nature of this field of research. We received 108 papers and extended abstracts this year from research institutes in Europe, Asia, North/South America, and Australasia, reflecting the truly international community that has developed and grown through social robotics research. Of these submissions, 55 were accepted as full papers with a further 13 accepted as extended abstracts. The Program Committee consisted of an experienced team of active researchers in the field of social robotics, many of whom have supported the ICSR series since its inception. We gratefully acknowledge the contribution made by the reviewers this year in selecting what we see as the definitive “snap-shot” of the social robotics research landscape in 2013.

There were two invited speakers this year delivering keynote speeches on each of the working days of the conference; Professor Rolf Pfeifer, director of the Artificial Intelligence Laboratory at the University of Zurich; and Professor Qiang Huang from the Intelligent Robotics Institute at the Beijing Institute of Technology. A highly successful dinner speech enlightened the conference participants during the conference banquet. Moreover, two competitions were held at the conference which inspired future researchers in this highly multi-disciplinary field of social robotics: The Robot design competition was sponsored by the Technical and Professional Network of the Institution of Engineering and Technology (IET) in Robotics and Mechatronics and co-organised together with the Pervasive Media Studio from Bristol. The NAO Programming Competition was

organized together with Aldebaran Robotics, and their UK distributor Active Robots who also provided the prizes for this highly exciting competition. We acknowledge the effort of all who helped in the organization of the conference, from the founding members of the standing committee for their guidance and momentum, through to the student helpers and caterers on the day.

We hope that the readers will find within this volume papers that stimulate their interest in social robotics, further their knowledge base in this field, and inspire fruitful work and collaboration in the future.

October 2013

Guido Herrmann
Martin J. Pearson
Alexander Lenz

Organization

ICSR 2013 was organized by the University of Bristol and the University of the West of England, Bristol, working together through the joint venture of the Bristol Robotics Laboratory. The Pervasive Media Studio from Bristol co-organized the Robot Design Competition of the conference.

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