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Preface

Welcome to the proceedings of the 4th International Conference on Social Robotics (ICSR). The conference was held during October 29–31, 2012, at Chengdu, China. Since its inception in 2009, the ICSR series of conferences have brought researchers together to report and discuss the latest progress in the field of social robotics in a collegial, supportive, and constructive atmosphere.

The ICSR conferences focus on the interaction between humans and robots, and the integration of robots into our society. The theme of the 2012 conference was “Wellness.” This theme highlights the potential and capabilities of social robots to assist humans in achieving better physical, mental, and emotional health and wellness. The conference aims to foster discussion on the development of computational models, robotic embodiments, and behaviors that enable social robots to have an impact on the human partner’s health and well-being.

The conference website was viewed by visitors from at least 70 countries. We received paper submissions from Asia, Europe, North America, South America, and Australia—a confirmation of the global interest being generated by the field of Social Robotics. The submitted papers were subjected to a rigorous peer-review selection. All the papers were reviewed with the help of the 31-member Program Committee, who were carefully selected from the international community of social robotics researchers for their expertise.

This volume contains the papers at the forefront of social robotics research in the areas of affective and cognitive sciences for socially interactive robots; situated interaction and embodiment; robots to assist the elderly and persons with disabilities; artificial empathy; interaction and collaboration among robots, humans, and environments; socially assistive robots to improve quality of life; socially appealing design methodologies; social acceptance; and robot ethics.

The conference also featured invited talks by four distinguished researchers in the field: Paolo Dario (Scuola Superiore Sant’Anna), Cynthia Breazeal (Massachusetts Institute of Technology), Hong Zhou (General Logistics Department of China Armed Force), and Etienne Burdet (Imperial College).

The continuing success of ICSR would not have been possible without the contributions of our colleagues, to whom we would like to express our gratitude. We are indebted to the members of the International Advisory Board, Organizing Committee, and the Program Committee for their dedication and support. We thank Hongsheng He (NUS) and Martin Sauerbeck (A*STAR) for their valuable contributions in the publication of this volume; Ravindra de Silva (Toyohashi), Guido Herrmann (University of Bristol) and Caihua Xiong (HUST) for the publicity efforts; Adrian Tay (A*STAR) and Ho Seok Ahn (ATR) for the robot design competition; Wei He (UESTC) for the finance; Kaiyu Qin (UESTC) for the local organization, and Zhengchen Zhang (NUS) for the Web services.

We also would like to acknowledge the Special Session Chairs Gordon Cheng (TUM) and Adriana Tapus (ENSTA); and the special session organizers: Ben Robins and Kerstin Dautenhahn (University of Hertfordshire) for the session on situated interaction and embodiment; Luisa Damiano (University of Bergamo), Paul Dumouchel (Ritsumeikan University) and Hagen Lehmann (University of Hertfordshire) for the session on artificial empathy; and Ryad Chellali (Italian Institute of Technology) for HRI through non-verbal communication and control.

Finally, we wish to thank the authors for sending their best work, the referees, student helpers, sponsors, and delegates for their valuable contributions to this growing community.

October 2012

Shuzhi Sam Ge
Oussama Khatib
John-John Cabibihan
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