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Preface

This volume is an edition of the papers selected from the 12th FIRA RoboWorld Congress, held in Incheon, Korea, August 16–18, 2009.

The Federation of International Robosoccer Association (FIRA – www.fira.net) is a non-profit organization, which organizes robotic competitions and meetings around the globe annually. The RoboSoccer competitions started in 1996 and FIRA was established on June 5, 1997. The Robot Soccer competitions are aimed at promoting the spirit of science and technology to the younger generation. The congress is a forum in which to share ideas and future directions of technologies, and to enlarge the human networks in robotics area.

The objectives of the FIRA Cup and Congress are to explore the technical development and achievement in the field of robotics, and provide participants with a robot festival including technical presentations, robot soccer competitions and exhibits under the theme “Where Theory and Practice Meet.”

Under the umbrella of the 12th FIRA RoboWorld Congress Incheon 2009, six international conferences were held for greater impact and scientific exchange:

- 6th International Conference on Computational Intelligence, Robotics and Autonomous Systems (CIRAS)
- 5th International Symposium on Autonomous Minirobots for Research and Edutainment (AMiRE)
- International Conference on Social Robotics (ICSR)
- International Conference on Advanced Humanoid Robotics Research (ICAHRR)
- International Conference on Entertainment Robotics (ICER)
- International Robotics Education Forum (IREF)

This volume consists of selected quality papers from the six conferences. The volume is intended to provide readers with the recent technical progresses in robotics, human–robot interactions, cooperative robotics and the related fields.

The volume has 31 papers from the 115 contributed papers at the FIRA RoboWorld Congress Incheon 2009. This volume is organized into seven sections:

- Emotion and Behavior, Human–Robot Interaction, Biped / Humanoid Robotics, Localization, Path Planning, Obstacle Avoidance, Control, Communication, Terrain mapping, and, Classification.

The editors hope that this volume is informative to the readers. We thank Springer for undertaking the publication of this volume.

Prahlad Vadakkepat

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