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RoboCup 2002: Robot Soccer World Cup VI

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Preface

RoboCup 2002, the 6th Robot World Cup Soccer and Rescue Competitions and Conference, took place during June 19–25, 2002, at the Fukuoka Dome (main venue) in Fukuoka, Japan. It was, by far, the RoboCup event with the largest number of registered participants (1004 persons, distributed in 188 teams from 29 countries) and visitors (around 120,000 persons). As was done in its previous editions since 1997, the event included several robotic competitions and an international symposium. The papers and posters presented at the symposium constitute the main part of this book. League reports in the final section describe significant advances in each league and the results.

The symposium organizers received 76 submissions, among which 17 papers (22%) were accepted for oral presentation at the symposium (first section of the book), and 21 papers (29%) were accepted as posters (second section of the book). Most papers were evaluated by three reviewers each, chosen from the members of the International Program Committee (IPC). The IPC consisted of a balanced combination of regular RoboCup participants and researchers from outside this community. The reviewers worked hard to guarantee a fair review process – the result of their work was a high-quality symposium with very interesting presentations.

From the papers accepted for oral presentation, the IPC and the symposium chairs selected three finalists for the symposium prizes. The Scientific Challenge Award was given to the paper "RoboCupJunior: Learning with Educational Robotics," by Elizabeth Sklar, Amy Eguchi, and Jeffrey Johnson. The Engineering Challenge Award was given to two papers: "MPADES: Middleware for Parallel Agent Discrete Event Simulation," by Patrick Riley, and "Towards RoboCup Without Color Labeling," by Robert Hanek, Thorsten Schmitt, Sebastian Buck, and Michael Beetz.

Five internationally renowned researchers accepted our invitation to give special talks at the symposium:

- "Humanoid Robots as Research Tools of Neuroscience," by Mitsuo Kawato (ATR, Japan).
- "A Small Humanoid Robot SDR-4X for Entertainment Based on OPEN-R," by Masahiro Fujita (DCL, SONY, Japan).
- "Cooperation by Observation," by Yasuo Kuniyoshi (University of Tokyo, Japan).
- "A Research and Development Vision for Robot-Assisted Search and Rescue," by John Blitch (CRASAR, USA).
- "Multi-robot Systems: Where We've Been and Where We're Going," by Lynne Parker (Oak Ridge National Laboratory and University of Tennessee, USA).

The last talk was delivered at a joint session with DARS-2002, the 6th International Symposium on Distributed Autonomous Robotic Systems.

The competitions were organized into seven leagues, the Rescue leagues (Simulation and Real Robots), the Soccer leagues (Simulation, Humanoids, Middle-Size, Small-Size, and 4-Legged), and the RoboCup Junior soccer and dance competitions for children, roughly in the age range 10–18 years old. The overview article at the beginning of the book summarizes all the competitions.

The editors of this book are grateful to the RoboCup Federation for all the logistic and financial assistance provided for the realization of the symposium. Minoru Asada carried the burden of organizing the printed edition of the preproceedings and the production of the respective CD. He did a great job organizing RoboCup 2002 and making the symposium possible. We are also grateful to our families who had to cope with our strange working hours, while we were sending e-mails and files back and forth across three time zones and three continents.

The next international RoboCup events will be held in Padua, Italy, in 2003, and in Lisbon, Portugal, in 2004.

May 2003

Gal Kaminka
Pedro U. Lima
Raul Rojas

RoboCup Federation

The RoboCup Federation, the governing body of Robocup, is an international organization that promotes science and technology in the field of mobile robots and software agents.

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