

Lecture Notes in Artificial Intelligence 4434

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RoboCup 2006: Robot Soccer World Cup X

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Preface

The 10th RoboCup International Symposium was held during June 19–20, 2006 at the Fair & Convention Center in Bremen, Germany, immediately after the 2006 Soccer, Rescue and Junior Competitions. RoboCup is increasingly seen by the robotics community as a significant approach to the evaluation of the effectiveness of the proposed solutions to the many difficult robotics problems.

The RoboCup International symposium hosted scientific contributions in all the areas relevant to RoboCup Competitions. The number of submissions to the Symposium increased again and totalled 143. Each paper was reviewed by at least three Program Committee members. The Program Committee included researchers involved in RoboCup and other scientists from outside the RoboCup community. Papers that received dissenting recommendations were discussed among the reviewers, moderated by the Co-chairs. The final decisions were made by the Co-chairs, who selected 22 submissions as full papers and 36 submissions as posters. This means an acceptance rate of less than 16% for full papers and less than 41% considering posters.

The symposium was run in single-track to allow coverage of all robotic-related topics by all attendees. We had five sessions for oral presentations and two poster sessions. We were also delighted to have two outstanding invited speakers. Hod Lipson (Cornell University, USA) spoke about his work on biologically inspired robotics in his talk “Biologically Inspired Robotics: From Evolving to Self-Reproducing Machines.” Sebastian Thrun (Stanford University, USA) described how his team won the DARPA Grand Challenge in his talk “Winning the DARPA Grand Challenge.”

The Symposium Co-chairs selected a few papers as nominees for the Best Paper Award and for the Best Student Paper Award. The RoboCup trustees made the final decision and selected “A 3D Simulator of Multiple Legged Robots Based on USARSim” by M. Zaratti, M. Fratarcangeli, L. Iocchi as Best Paper and “Half Field Offense in RoboCup Soccer: A Multiagent Reinforcement Learning Case Study” by S. Kalyanakrishnan, Y. Liu, P. Stone as Best Student Paper.

As the quality of the symposium depends heavily on the quality of the generous Program Committee members, we wish to particularly thank them for their work, which was very hard and concentrated in a very short time. We would also like to thank the Local Organizing Committee, headed by Ubbo Visser, for turning Robocup 2006 into such a memorable and enjoyable event. Last but not least we thank Stefan Schiffer for his help in preparing these proceedings.

Congratulations to the RoboCup Competitions and the RoboCup Symposium, which celebrated their tenth anniversary this year in Bremen!

December 2006

Gerhard Lakemeyer
Elizabeth Sklar
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