

Lecture Notes in Artificial Intelligence 5399

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RoboCup 2008: Robot Soccer World Cup XII

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Preface

The 12th annual RoboCup International Symposium was held during July 15–18, 2008 in conjunction with RoboCup 2008 Competitions and Demonstrations. The symposium represents the core meeting for the presentation and discussion of scientific contributions in diverse areas related to the main threads within RoboCupSoccer, RoboCupRescue, RoboCup@Home and RoboCupJunior. Its scope encompassed, but was not restricted to, research and education activities within the fields of artificial intelligence and robotics.

A fundamental aspect of RoboCup is promoting science and technology among young students and researchers, in addition to providing a forum for discussion and excitement about Robotics with practitioners from all over the world. Since its first edition in 1997 in Nagoya, the RoboCup Competitions and Symposium have attracted an increasing number of researchers and students from all the world and today it is a major event in robotics worldwide.

Due to its interdisciplinary nature and the exploration of various and intimate connections of theory and practice across a wide spectrum of different fields, the symposium offered an excellent opportunity to introduce new techniques to various scientific disciplines. The experimental, interactive and benchmark character of the RoboCup initiative created the opportunity to present, learn and evaluate novel ideas and approaches with significant potential. If promising, they are then rapidly adopted and field-tested by a large (and still strongly growing) community.

For the 12th RoboCup International Symposium we received 91 paper submissions, covering a variety of areas. The papers were carefully reviewed by the International Program Committee, which selected 36 oral and 20 poster presentations. Each paper was reviewed by at least three Program Committee members and the final decisions were made by the Co-chairs.

In addition to the paper and poster presentations, we had three invited speakers:

- Jean-Guy Fontaine, from the Italian Institute of Technology (IIT), Genoa, Italy, whose talk was about "Tele-operation and Tele-cooperation with Humanoids"
- Tianmiao Wang, from Beijing University of Aeronautics and Astronautics, Institute of Robotics, Beijing, China, who talked about "The Advanced Robotics R&D and Progress of the 863 High-Tech Program in China"
- Sven Behnke, from Rheinische Friedrich-Wilhelms-Universität, Institut für Informatik VI, Bonn, Germany, who talked about "Designing a Team of Humanoid Soccer Robots"

We would like to take this opportunity to thank all the authors for their contributions, the Program Committee members and the additional reviewers for their hard

work, which had to be completed in a short period of time, the invited speakers for their participation, and the Chinese local organizers for making the RoboCup Symposium 2008 a successful event.

December 2008

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