Record Nr. UNINA9910144028503321 RoboCup 2002: Robot Soccer World Cup VI / / edited by Gal A. **Titolo** Kaminka, Pedro U. Lima, Raul Rojas Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2003 **ISBN** 3-540-45135-8 Edizione [1st ed. 2003.] Descrizione fisica 1 online resource (XVI, 504 p.) Collana Lecture Notes in Artificial Intelligence;; 2752 Disciplina 629.8/92 Soggetti Artificial intelligence Computer communication systems Software engineering User interfaces (Computer systems) Computer simulation Artificial Intelligence Science, Humanities and Social Sciences, multidisciplinary Computer Communication Networks Software Engineering User Interfaces and Human Computer Interaction Simulation and Modeling Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto An Overview of RoboCup 2002 Fukuoka/Busan -- Technical Papers --Constraint-Based Landmark Localization -- Improving Vision-Based Self-localization -- Evaluation of Self-localization Performance for a Local Vision Robot in the Small Size League -- Fast Image Processing and Flexible Path Generation System for RoboCup Small Size League --A Modified Potential Fields Method for Robot Navigation Applied to Dribbling in Robotic Soccer -- Using Online Learning to Analyze the Opponent's Behavior -- Hidden Markov Modeling of Multi-agent Systems and Its Learning Method -- Learning the Seguential

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Agent -- Team Formation for Reformation in Multiagent Domains Like RoboCupRescue -- MPADES: Middleware for Parallel Agent Discrete Event Simulation -- Towards RoboCup without Color Labeling --Integration of Advice in an Action-Selection Architecture -- The Role of Motion Dynamics in the Design, Control and Stability of Bipedal and Quadrupedal Robots -- Multiagent Competitions and Research: Lessons from RoboCup and TAC -- RoboCupJunior: Learning with Educational Robotics -- Posters -- A Rescue Robot Control Architecture Ensuring Safe Semi-autonomous Operation -- A Framework for Learning from Observation Using Primitives -- Robosoccer-RU Open Simulation League: Principles and Algorithms -- An Interactive Software Environment for Gait Generation and Control Design of Sony Legged Robots -- Real-Time Randomized Path Planning for Robot Navigation -- Towards an Optimal Scoring Policy for Simulated Soccer Agents --Decision-Making and Tactical Behavior with Potential Fields --Localization of Robots in F180 League Using Projective Geometry --Reinforcement Learning in Large State Spaces -- Co-evolution of Morphology and Controller for Biped Humanoid Robot -- Towards Real-Time Strategic Teamwork: A RoboCup Case Study -- MUREA: A MUlti-Resolution Evidence Accumulation Method for Robot Localization in Known Environments -- Direct Reward and Indirect Reward in Multiagent Reinforcement Learning -- Relating the Entropy of Joint Beliefs to Multi-agent Coordination -- Real-Time Decision Making under Uncertainty of Self-localization Results -- KiRo - An Autonomous Table Soccer Player -- Adaptive Methods to Improve Self-localization in Robot Soccer -- Team Coordination among Robotic Soccer Players --An Architecture for a National RoboCup Team -- Probabilistic Vision-Based Opponent Tracking in Robot Soccer -- Behavior Acquisition Based on Multi-module Learning System in Multi-agent Environment --League Reports -- Simulation League - League Summary -- RoboCup 2002 Small-Size League Review -- Medium Size League: 2002 Assessment and Achievements -- Sony Four Legged Robot League at RoboCup 2002 -- RoboCupRescue Simulation League --RoboCupRescue Robot League -- Lessons Learned from Fukuoka 2002 Humanoid League -- RoboCupJunior 2002: The State of the League.

Sommario/riassunto

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 largestnumberofregisteredparticipants (1004persons, distributedin 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 aninternational symposium.

Thepapersandposterspresentedatthesymposium constitutethemainpartofthisbook.Leaguereportsinthe? nalsectiondescribe signi?cant 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 (? rst 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 - teresting presentations.