1. Record Nr. UNISA996466178103316

RoboCup-98: robot soccer world cup II / / Minoru Asada, Hiroaki **Titolo**

Kitano, editors

Pubbl/distr/stampa Berlin:,: Springer Verlag,, [1999]

©1999

3-540-48422-1 **ISBN**

[1st ed. 1999.] Edizione

Descrizione fisica 1 online resource (XI, 514 p. 250 illus.)

Lecture Notes in Artificial Intelligence;; 1604 Collana

Disciplina 629.892

Soggetti Robotics

Artificial intelligence

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 and index.

Nota di contenuto Overview and Award Papers -- Overview of RoboCup-98 -- Character

Design for Soccer Commentary -- Automatic Soccer Commentary and RoboCup -- Rocco: A RoboCup Soccer Commentator System -- The

CMUnited-98 Champion Simulator Team -- The CMUnited-98

Champion Small-Robot Team -- The CS Freiburg Robotic Soccer Team: Reliable Self-Localization, Multirobot Sensor Integration, and Basic Soccer Skills -- Technical Papers -- The Survey of RoboCup' 98: Who. How and Why -- How to Make a Challenging AI Course Enjoyable Using the RoboCup Soccer Simulation System -- A Quadruped Robot for RoboCup Legged Robot Challenge in Paris '98 -- Robot Soccer with LEGO Mindstorms -- Ball-Receiving Skill Dependent on Centering in Soccer Simulation Games -- The Priority/Confidence Model as a

Framework for Soccer Agents -- A User Oriented System for Developing

Behavior Based Agents -- From Play Recognition to Good Plays Detection -- Inductive Verification and Validation of the KULRoT RoboCup Team -- Layered and Resource-Adapting Agents in the RoboCup Simulation -- A Description-Processing System for Soccer Agents and NIT Stones 98 -- Using an Explicit Teamwork Model and Learning in RoboCup: An Extended Abstract -- A Hybrid Agent Model,

Mixing Short Term and Long Term Memory Abilities -- Team-

Partitioned, Opaque-Transition Reinforcement Learning -- Cooperative Behavior Acquisition in a Multiple Mobile Robot Environment by Co-

evolution -- Integrated Reactive Soccer Agents -- An Innovative Approach to Vision, Localization and Orientation Using Omnidirectional Radial Signature Analysis -- An Application of Vision-Based Learning in RoboCup for a Real Robot with an Omnidirectional Vision System and the Team Description of Osaka University "Trackies" -- The RoboCup-NAIST: A Cheap Multisensor-Based Mobile Robot with Visual Learning Capability -- Team Description -- Andhill-98: A RoboCup Team which Reinforces Positioning with Observation -- Evolving Team Darwin United -- UBU: Utility-Based Uncertainty Handling in Synthetic Soccer -- AT Humboldt in RoboCup-98 (Team description) -- Individual Tactical Play and Pass with Communication between Players -- UFSCteam: A Cognitive Multi-agent Approach to the RoboCup'98 Simulator League -- Description of Team Erika -- Getting global performance through local information in PaSo-Team'98 -- A Direct Approach to Robot Soccer Agents: Description for the Team Mainz Rolling rains Simulation League of RoboCup '98 -- CAT Finland: Executing Primitive Tasks in Parallel -- A Multi-level Constraint-based Controller for the Dynamo98 Robot Soccer Team -- The small league RoboCup team of the VUB AI-Lab -- CIIPS Glory Soccer Robots with Local Intelligence --The Cambridge University Robot Football Team Description -- The UQ RoboRoos Small-Size League Team Description for RoboCup'98 --ISocRob — Team Description -- Real MagiCol 98: Team Description and Results -- Agilo RoboCuppers: RoboCup Team Description -- The Ulm Sparrows: Research into Sensorimotor Integration, Agency, Learning, and Multiagent Cooperation -- ART Azzurra Robot Team -- Design and Evaluation of the T-Team of the University of Tuebingen for RoboCup' 98 -- Team Description of the GMD RoboCup-Team -- UTTORI United: Cooperative Team Play Based on Communication -- Quadruped Robot Guided by Enhanced Vision System and Supervision Modules -- The CMTrio-98 Sony Legged Robot Team -- BabyTigers-98: Osaka Legged Robot Team.

Sommario/riassunto

RoboCup is an international initiative devoted to advancing the state of the art in artificial intelligence and robotics. The aims of the project and potential research directions are numerous. The ultimate, long-range goal is to build a team of robot soccer players that can beat a human World Cup champion team. This book is the second official archival publication devoted to RoboCup. It documents the achievements presented at the Second International Workshop on RoboCup held in Paris, France, in July 1998. The book opens with an overview section, provides research papers on selected technical topics, and presents technical and strategic descriptions of the work of participating teams. Of interest far beyond the rapidly growing RoboCup community, this book is also indispensable reading for R&D professionals interested in multi-agent systems, distributed artificial intelligence, and intelligent robotics.