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Titolo	RoboCup-99: Robot Soccer World Cup III [[electronic resource] /] / edited by Manuela Veloso, Enrico Pagello, Hiroaki Kitano
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Collana	Lecture Notes in Artificial Intelligence ; ; 1856
Disciplina	629.8/92
Soggetti	Artificial intelligence Computer communication systems Computer simulation User interfaces (Computer systems) Computational complexity Artificial Intelligence Computer Communication Networks Simulation and Modeling User Interfaces and Human Computer Interaction Complexity
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Overview of RoboCup-99 -- Overview of RoboCup-99 -- Champion Teams -- The CMUnited-99 Champion Simulator Team -- Big Red: The Cornell Small League Robot Soccer Team -- Middle Sized Soccer Robots: ARVAND -- Vision Based Behavior Strategy to Play Soccer with Legged Robots -- Scientific Challenge Award Papers -- Automated Assistants to Aid Humans in Understanding Team Behaviors -- LogMonitor: From Player's Action Analysis to Collaboration Analysis and Advice on Formation -- A Statistical Perspective on the RoboCup Simulator League: Progress and Prospects -- Technical Papers -- Real- time Color Detection System using Custom LSI for High-Speed Machine Vision -- A Segmentation System for Soccer Robot Based on Neural Networks -- Practical Camera and Colour Calibration for Large Rooms

-- Path Tracking Control of Non-holonomic Car-Like Robot with Reinforcement Learning -- Fast Image Segmentation, Object Recognition and Localization in a RoboCup Scenario -- Using Hierarchical Dynamical Systems to Control Reactive Behavior -- Heterogeneity and On-Board Control in the Small Robots League -- The Body, the Mind or the Eye, first? -- Motion Control in Dynamic Multi-Robot Environments -- Behavior Engineering with "Dual Dynamics" Models and Design Tools -- Techniques for Obtaining Robust, Real-Time, Colour-Based Vision for Robotics -- Design Issues for a Robocup Goalkeeper -- Layered Reactive Planning in the IALP Team -- From a Concurrent Architecture to a Concurrent Autonomous Agents Architecture -- Tracking and Identifying in Real Time the Robots of a F-180 Team -- VQQL. Applying Vector Quantization to Reinforcement Learning -- Fast Accurate and Robust Self-Localization in the RoboCup Environment -- Self-Localization in the RoboCup Environment -- Virtual RoboCup: Real-Time 3D Visualization of 2D Soccer Games -- The RoboCup-98 Teamwork Evaluation Session: A Preliminary Report -- Towards a Distributed Multi-agent System for a Robotic Soccer Team -- A Multi-threaded Approach to Simulated Soccer Agents for the RoboCup Competition -- A Functional Architecture for a Team of Fully Autonomous Cooperative Robots -- Extension of the Behaviour Oriented Commands (BOC) Model for the Design of a Team of Soccer Players Robots -- Modular Simulator: A Draft of New Simulator for RoboCup -- Programming Real Time Distributed Multiple Robotic Systems -- The Attempto RoboCup Robot Team -- Rogi Team Real: Dynamical Physical Agents -- Learning to Behave by Environment Reinforcement -- End User Specification of RoboCup Teams -- Purposeful Behavior in Robot Soccer Team Play -- Autonomous Information Indication System -- Spatial Agents Implemented in a Logical Expressible Language -- Layered Learning and Flexible Teamwork in RoboCup Simulation Agents -- A Method for Localization by Integration of Imprecise Vision and a Field Model -- Multiple Reward Criterion for Cooperative Behavior Acquisition in a Multiagent Environment -- BDI Design Principles and Cooperative Implementation in RoboCup -- Team Descriptions -- AT Humboldt in RoboCup-99 (Team description) -- Cyberoos'99: Tactical Agents in the RoboCup Simulation League -- 11Monkeys Description -- Team Erika -- Essex Wizards'99 Team Description -- FCfoo99 -- Footux Team Description A Hybrid Recursive Based Agent Architecture -- Gongeroos'99 -- Headless Chickens III -- IALP -- Kappa-II -- Karlsruhe Brainstormers - Design Principles -- Kasugabito III -- RoboCup-99 Simulation League: Team KU-Sakura2 -- The magmaFreiburg Soccer Team -- Mainz Rolling Brains -- NITStones-99 -- Oulu 99 -- Pardis -- PaSo-Team'99 -- PSI Team -- RoboLog Koblenz -- Rational Agents by Reviewing Techniques -- The Ulm Sparrows 99 -- UBU Team -- YowAI -- Zeng99: RoboCup simulation team with Hierarchical Fuzzy Intelligent Control and Cooperative Development -- Small-Size Robot (F180) League -- All Botz -- Big Red: The Cornell Small League Robot Soccer Team -- The CMUnited-99 Small-Size Robot Team -- 5dpo Team Description -- FU-Fighters Team Description -- Linked99 -- OWARI-BITO -- Rogi 2 Team Description -- Temasek Polytechnic RoboCup Team-TPOTs -- The VUB AI-lab RoboCup'99 Small League Team -- Middle-Size Robot (F2000) League -- Agilo RoboCuppers: RoboCup Team Description -- ART99 - Azzurra Robot Team -- CoPS-Team Description -- CS Freiburg' 99 -- DREAMTEAM 99: Team Description Paper -- Description of the GMD RoboCup-99 Team -- ISocRob — Intelligent Society of Robots -- KIRC: Kyutech Intelligent Robot Club -- The Concept of Matto -- The RoboCup-NAIST -- Robot Football Team

from Minho University -- Real MagiCol 99: Team Description -- RMIT Raiders -- Design and Construction of a Soccer Player Robot ARVAND -- The Team Description of Osaka University "Trackies-99" -- 5dpo-2000 Team Description -- Sony Legged Robot League -- Team ARAIBO -- BabyTigers-99: Osaka Legged Robot Team -- CM-Trio-99 -- Humboldt Hereos in RoboCup-99 (Team description) -- McGill RedDogs -- Team Sweden -- UNSW United -- UPennalizers: The University of Pennsylvania RoboCup Legged Soccer Team.

Sommario/riassunto

This book is the third official archival publication devoted to RoboCup and documents the achievements presented at the Third Robot World Cup Soccer Games and Conferences, Robo-Cup-99, held in Stockholm, Sweden in July/August 1999. The book presents the following parts - Introductory overview and survey - Research papers of the champion teams and scientific award winners - Technical papers presented at the RoboCup-99 Workshop - Team description of a large number of participating teams. This book is mandatory reading for the rapidly growing RoboCup community as well as a valuable source of reference and inspiration for R&D professionals interested in multi-agent systems, distributed artificial intelligence, and intelligent robotics.
