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Nota di bibliografia	Includes bibliographical references and index.
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Feature Detection Approach for Robotic Vision -- Illumination
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AIBO Robot Using Camera Motion Compensation and Kalman Filtering -- The Use of Gyroscope Feedback in the Control of the Walking Gaits for a Small Humanoid Robot -- The UT Austin Villa 2003 Champion Simulator Coach: A Machine Learning Approach -- ITAS and the Reverse RoboCup Challenge -- SPQR-RDK: A Modular Framework for Programming Mobile Robots -- Mobile Autonomous Robots Play Soccer -- An Intercultural Comparison of Different Approaches Due to Different Prerequisites -- From Games to Applications: Component Reuse in Rescue Robots.

Sommario/riassunto

These are the proceedings of the RoboCup 2004 Symposium, held at the Instituto Superior Técnico, in Lisbon, Portugal in conjunction with the RoboCup competition. The papers presented here document the many innovations in robotics that result from RoboCup. A problem in any branch of science or engineering is how to devise tests that can provide objective comparisons between alternative methods. In recent years, competitive engineering challenges have been established to motivate researchers to tackle difficult problems while providing a framework for the comparison of results. RoboCup was one of the first such competitions and has been a model for the organization of challenges following sound scientific principles. In addition to the competition, the associated symposium provides a forum for researchers to present refereed papers. But, for RoboCup, the symposium has the greater goal of encouraging the exchange of ideas between teams so that the competition, as a whole, progresses from year to year and strengthens its contribution to robotics. One hundred and eighteen papers were submitted to the Symposium. Each paper was reviewed by at least two international referees; 30 papers were accepted for presentation at the Symposium as full papers and a further 38 were accepted for poster presentation. The quality of the Symposium could not be maintained without the support of the authors and the generous assistance of the referees.
