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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1998
Disciplina	629.8/92637
Soggetti	Computers Robotics Automation Optical data processing Pattern perception Artificial intelligence Computer graphics Theory of Computation Robotics and Automation Image Processing and Computer Vision Pattern Recognition Artificial Intelligence Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Active Perception -- Visual Cues for a Fixating Active Agent -- Tracking with a Novel Pose Estimation Algorithm -- Real-Time Tracking of Articulated Human Models Using a 3D Shape-from-Silhouette Method -- Hierarchical 3D Pose Estimation for Articulated Human Body Models from a Sequence of Volume Data -- Vision-Based Robot Localization Using Sporadic Features -- Computer Vision -- A Comparison of Feature Measurements for Kinetic Studies on Human Bodies -- Object Identification and Pose Estimation for Automatic

Manipulation -- Toward Self-calibration of a Stereo Rig from Noisy Stereoscopic Images -- A Color Segmentation Algorithm for Real-Time Object Localization on Small Embedded Systems -- EYESCAN - A High Resolution Digital Panoramic Camera -- A Wavelet-Based Algorithm for Height from Gradients -- Enhanced Stereo Vision Using Free-Form Surface Mirrors -- Robotics & Video -- RoboCup-99: A Student's Perspective -- Horus: Object Orientation and Id without Additional Markers -- An Stereoscopic Vision System Guiding an Autonomous Helicopter for Overhead Power Cable Inspection -- 3D Stereo Vision-Based Nursing Robot for Elderly Health Care -- Efficient Computation of Intensity Profiles for Real-Time Vision -- Subpixel Flow Detection by the Hough Transform -- Tracking of Moving Heads in Cluttered Scenes from Stereo Vision -- Servoing Mechanisms for Peg-In-Hole Assembly Operations -- Robot Localization Using Omnidirectional Color Images -- The Background Subtraction Problem for Video Surveillance Systems -- Computational Stereo -- Stable Monotonic Matching for Stereoscopic Vision -- Random Sampling and Voting Method for Three-Dimensional Reconstruction -- Binocular Stereo by Maximizing the Likelihood Ratio Relative to a Random Terrain -- Stereo Reconstruction from Polycentric Panoramas -- Robotic Vision -- Two Modules of a Vision-Based Robotic System: Attention and Accumulation of Object Representations -- Compatibilities for the Perception-Action Cycle -- Trifocal Tensors with Grassmann-Cayley Algebra -- Camera Calibration Using Rectangular Textures -- Image Acquisition -- Optical Flow in Log-mapped Image Plane -- Hypothetically Modeled Perceptual Sensory Modality of Human Visual Selective Attention Scheme by PFC-Based Network -- Results of Test Flights with the Airborne Digital Sensor ADS40 -- Localized Video Compression for Machine Vision.

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## Sommario/riassunto

This book constitutes the refereed proceedings of the International Workshop on Robot Vision, RobVis 2001, held in Auckland, New Zealand in February 2001. The 17 revised full papers presented together with 17 posters were carefully reviewed and selected from 52 submissions. The papers and posters are organized in topical sections on active perception, computer vision, robotics and video, computational stereo, robotic vision, and image acquisition.

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