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Nota di contenuto Cognitive Vision -- Visual Search in Static and Dynamic Scenes Using

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Video Surveillance: A MoG Model in the Wavelet Domain -- Computer Vision Architectures -- Feature Extraction and Classification by Genetic Programming -- GPU-Based Multigrid: Real-Time Performance in High Resolution Nonlinear Image Processing -- Attention Modulation Using Short- and Long-Term Knowledge -- PCA Based 3D Shape Reconstruction of Human Foot Using Multiple Viewpoint Cameras -- An On-Line Interactive Self-adaptive Image Classification Framework --Communication-Aware Face Detection Using Noc Architecture --Calibration and Registration -- A System for Geometrically Constrained Single View Reconstruction -- Monocular Omnidirectional Visual Odometry for Outdoor Ground Vehicles -- Eyes and Cameras Calibration for 3D World Gaze Detection -- Evaluating Multiview Reconstruction -- Object Recognition and Tracking -- Detecting and Recognizing Abandoned Objects in Crowded Environments --Diagnostic System for Intestinal Motility Disfunctions Using Video Capsule Endoscopy -- An Approach for Tracking the 3D Object Pose Using Two Object Points -- Adaptive Motion-Based Gesture Recognition Interface for Mobile Phones -- Weighted Dissociated Dipoles: An Extended Visual Feature Set -- Scene Classification Based on Multi-resolution Orientation Histogram of Gabor Features --Automatic Object Detection on Aerial Images Using Local Descriptors and Image Synthesis -- CEDD: Color and Edge Directivity Descriptor: A Compact Descriptor for Image Indexing and Retrieval -- Ranking Corner Points by the Angular Difference between Dominant Edges --Skeletonization Based on Metrical Neighborhood Sequences -- Bottom-Up and Top-Down Object Matching Using Asynchronous Agents and a Contrario Principles -- A Tale of Two Object Recognition Methods for Mobile Robots -- A Segmentation Approach in Novel Real Time 3D Plant Recognition System -- Face Recognition Using a Color PCA Framework -- Online Learning for Bootstrapping of Object Recognition and Localization in a Biologically Motivated Architecture -- Vein Segmentation in Infrared Images Using Compound Enhancing and Crisp Clustering -- Multiscale Laplacian Operators for Feature Extraction on Irregularly Distributed 3-D Range Data -- Learning -- A System That Learns to Tag Videos by Watching Youtube -- Geo-located Image Grouping Using Latent Descriptions -- Functional Object Class Detection Based on Learned Affordance Cues -- Increasing Classification Robustness with Adaptive Features -- Learning Visual Quality Inspection from Multiple Humans Using Ensembles of Classifiers -- Learning Contextual Variations for Video Segmentation --Learning to Detect Aircraft at Low Resolutions -- A Novel Feature Selection Based Semi-supervised Method for Image Classification --Sub-class Error-Correcting Output Codes -- Human Machine Interaction -- Spatio-temporal 3D Pose Estimation of Objects in Stereo Images -- Automatic Initialization for Facial Analysis in Interactive Robotics -- Face Recognition Across Pose Using View Based Active Appearance Models (VBAAMs) on CMU Multi-PIE Dataset -- Cross Modal Systems -- Object Category Detection Using Audio-Visual Cues -- Multimodal Interaction Abilities for a Robot Companion.

Sommario/riassunto

This book constitutes the refereed proceedings of the 6th International Conference on Computer Vision Systems, ICVS 2008, held in Santorini, Greece, May 12-15, 2008. The 23 revised papers presented together with 30 poster presentations and 2 invited papers were carefully reviewed and selected from 128 submissions. The papers are organized in topical sections on cognitive vision, monitor and surveillance, computer vision architectures, calibration and registration object recognition and tracking, learning, human machine interaction as well as cross modal systems.