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Titolo	Computer Vision -- ECCV 2012. Workshops and Demonstrations [[electronic resource] ] : Florence, Italy, October 7-13, 2012, Proceedings, Part II // edited by Andrea Fusiello, Vittorio Murino, Rita Cucchiara
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Descrizione fisica	1 online resource (XXII, 611 p. 323 illus.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 7584
Disciplina	006.6 006.37
Soggetti	Optical data processing Pattern recognition Artificial intelligence Algorithms Computer graphics Application software Image Processing and Computer Vision Pattern Recognition Artificial Intelligence Algorithm Analysis and Problem Complexity Computer Graphics Information Systems Applications (incl. Internet)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	International conference proceedings.
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	High Accuracy TOF and Stereo Sensor Fusion at Interactive Rates -- A Modular Framework for 2D/3D and Multi-modal Segmentation with Joint Super-Resolution -- Real-Time Plane Segmentation and Obstacle Detection of 3D Point Clouds for Indoor Scenes -- Combining Textural and Geometrical Descriptors for Scene Recognition -- Human-Centric Indoor Environment Modeling from Depth Videos -- Human Daily

Action Analysis with Multi-view and Color-Depth Data -- Viewpoint Invariant Matching via Developable Surfaces -- A Unified Energy Minimization Framework for Model Fitting in Depth -- Object Recognition Robust to Imperfect Depth Data -- 3D Object Detection with Multiple Kinects -- Unsolved Problems in Optical Flow and Stereo Estimation Combining Monocular Geometric Cues with Traditional Stereo Cues for Consumer Camera Stereo -- Quality Assessment of Non-dense Image Correspondences -- A Complete Confidence Framework for Optical Flow -- An Improved Stereo Matching Algorithm with Ground Plane and Temporal Smoothness Constraints -- On the Evaluation of Scene Flow Estimation -- Analysis of KITTI Data for Stereo Analysis with Stereo Confidence Measures -- Lessons and Insights from Creating a Synthetic Optical Flow Benchmark -- What's in a Face? Modeling and Detection of Wrinkles in Aging Human Faces Using Marked Point Processes -- How Does Aging Affect Facial Components? -- Spatio-Temporal Multifeature for Facial Analysis -- The Role of Facial Regions in Evaluating Social Dimensions -- Illumination Normalization Using Self-lighting Ratios for 3D2D Face Recognition -- Robust Learning from Normals for 3D Face Recognition -- Coupled Marginal Fisher Analysis for Low-Resolution Face Recognition -- Exploring Bag of Words Architectures in the Facial Expression Domain -- Kernel Conditional Ordinal Random Fields for Temporal Segmentation of Facial Action Units -- Exploring the Facial Expression Perception-Production Link Using Real-Time Automated Facial Expression Recognition -- Understanding Critical Factors in Appearance-Based Gender Categorization -- Facial Landmarking: Comparing Automatic Landmarking Methods with Applications in Soft Biometrics -- Periocular Recognition Using Retinotopic Sampling and Gabor Decomposition -- Exploiting Perception for Face Analysis: Image Abstraction for Head Pose Estimation -- Complex Bingham Distribution for Facial Feature Detection -- Estimating Surface Normals from Spherical Stokes Reflectance Fields -- Base Materials for Photometric Stereo -- Robust Luminance and Chromaticity for Matte Regression in Polynomial Texture Mapping -- Illuminant Estimation from Projections on the Planckian Locus -- Lighting Estimation in Indoor Environments from Low-Quality Images -- Color Constancy Using Single Colors -- An Effective Method for Illumination-Invariant Representation of Color Images -- Specularity, the Zeta-image, and Information-Theoretic Illuminant Estimation -- Robust Estimation of Pigment Distributions from Multiband Skin Images and Its Application to Realistic Skin Image Synthesis -- A Fisheye Camera System for Polarisation Detection on UAVs -- Time-Lapse Image Fusion -- HDR Imaging under Non-uniform Blurring -- Semantic Image Segmentation Using Visible and Near-Infrared Channels -- Utilization of False Color Images in Shadow Detection -- High Information Rate and Efficient Color Barcode Decoding -- Uzawa Block Relaxation Methods for Color Image Restoration -- Technology: From Earth to Mars Monocular Rear-View Obstacle Detection Using Residual Flow -- Subtraction-Based Forward Obstacle Detection Using Illumination Insensitive Feature for Driving-Support -- Adaptive Visual Obstacle Detection for Mobile Robots Using Monocular Camera and Ultrasonic Sensor -- Data-Driven Vehicle Identification by Image Matching -- A Vision-Based Navigation Facility for Planetary Entry Descent Landing -- CYKLS: Detect Pedestrian's Dart Focusing on an Appearance Change -- Pose-Invariant Face Recognition in Videos for Human-Machine Interaction -- Hierarchical Properties of Multi-resolution Optical Flow Computation -- Semantic Road Segmentation via Multi-scale Ensembles of Learned Features -- Monocular Visual Odometry and Dense 3D Reconstruction for On-Road

## Vehicles.

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### Sommario/riassunto

The three volume set LNCS 7583, 7584 and 7585 comprises the Workshops and Demonstrations which took place in connection with the European Conference on Computer Vision, ECCV 2012, held in Firenze, Italy, in October 2012. The total of 179 workshop papers and 23 demonstration papers was carefully reviewed and selected for inclusion in the proceedings. They were held at workshops with the following themes: non-rigid shape analysis and deformable image alignment; visual analysis and geo-localization of large-scale imagery; Web-scale vision and social media; video event categorization, tagging and retrieval; re-identification; biological and computer vision interfaces; where computer vision meets art; consumer depth cameras for computer vision; unsolved problems in optical flow and stereo estimation; what's in a face?; color and photometry in computer vision; computer vision in vehicle technology: from earth to mars; parts and attributes; analysis and retrieval of tracked events and motion in imagery streams; action recognition and pose estimation in still images; higher-order models and global constraints in computer vision; information fusion in computer vision for concept recognition; 2.5D sensing technologies in motion: the quest for 3D; benchmarking facial image analysis technologies.

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