Record Nr. UNISA996466188403316 Computer Vision -- ECCV 2012. Workshops and Demonstrations **Titolo** [[electronic resource]]: Florence, Italy, October 7-13, 2012, Proceedings, Part I / / edited by Andrea Fusiello, Vittorio Murino, Rita Cucchiara Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2012 **ISBN** 3-642-33863-1 Edizione [1st ed. 2012.] Descrizione fisica 1 online resource (XXII, 611 p. 276 illus.) Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 7583 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 Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Putting the Pieces Together: Regularized Multi-part Shape Matching --Combined Motion Estimation and Reconstruction in Tomography -- 3D Object Classification Using Scale Invariant Heat Kernels with Collaborative Classification -- 3D Facial Landmark Localization Using

Combinatorial Search and Shape Regression -- Statistical Shape

Analysis for Population Studies via Level-Set Based Shape Morphing --

Group-Valued Regularization for Analysis of Articulated Motion --Drawing an Automatic Sketch of Deformable Objects Using Only a Few Images -- Superfaces: A Super-Resolution Model for 3D Faces -- Stable Spectral Mesh Filtering -- Analytical Dynamic Programming Matching -- Correspondences of Persistent Feature Points on Near-Isometric Surfaces -- 3D Reconstruction of Non-Rigid Surfaces in Real-Time Using Wedge Elements -- Schrödinger Diffusion for Shape Analysis with Texture -- Anchored Deformable Face Ensemble Alignment -- Multiple Object Tracking via Prediction and Filtering with a Sobolev-Type Metric on Curves -- Facial Model Fitting Based on Perturbation Learning and It's Evaluation on Challenging Real-World Diversities Images --Adaptive Rendering for Large-Scale Skyline Characterization and Matching -- Ultra-wide Baseline Facade Matching for Geo-localization -- A Memory Efficient Discriminative Approach for Location Aided Recognition -- Web-Scale Vision and Social Media Weakly Supervised Learning of Object Segmentations from Web-Scale Video -- Classifier Ensemble Recommendation -- Towards Exhaustive Pairwise Matching in Large Image Collections -- Large Vocabularies for Keypoint-Based Representation and Matching of Image Patches -- Linearized Smooth Additive Classifiers -- Ask'nSeek: A New Game for Object Detection and Labeling -- Learning to Match Images in Large-Scale Collections --Efficient Mining of Repetitions in Large-Scale TV Streams with Product Quantization Hashing -- An Efficient Parallel Strategy for Matching Visual Self-similarities in Large Image Databases -- Atomic Action Features: A New Feature for Action Recognition -- Spatio-temporal SIFT and Its Application to Human Action Classification -- Statistics of Pairwise Co-occurring Local Spatio-temporal Features for Human Action Recognition -- Visual Code-Sentences: A New Video Representation Based on Image Descriptor Sequences -- Action Recognition Robust to Background Clutter by Using Stereo Vision --Recognizing Actions across Cameras by Exploring the Correlated Subspace -- Chinese Shadow Puppetry with an Interactive Interface Using the Kinect Sensor -- Group Dynamics and Multimodal Interaction Modeling Using a Smart Digital Signage -- Automated Textual Descriptions for a Wide Range of Video Events with 48 Human Actions -- Learning Implicit Transfer for Person Re-identification -- Person Reidentification: What Features Are Important? -- Towards Person Identification and Re-identification with Attributes -- Local Descriptors Encoded by Fisher Vectors for Person Re-identification -- Reidentification of Pedestrians in Crowds Using Dynamic Time Warping --Re-identification with RGB-D Sensors -- Identity Inference: Generalizing Person Re-identification Scenarios -- A General Method for Appearance-Based People Search Based on Textual Queries --Biological and Computer Vision Interfaces (BCVI) Lessons from the Primate Visual System -- Neural Mechanisms for Form and Motion Detection and Integration: Biology Meets Machine Vision -- Neural Fields Models of Visual Areas: Principles, Successes, and Caveats --Visual Cortex as a General-Purpose Information-Processing Device --Reading Out the Synaptic Echoes of Low-Level Perception in V1 --Learning Invariant Feature Hierarchies -- Fun with Asynchronous Vision Sensors and Processing -- Spike-Based Image Processing: Can We Reproduce Biological Vision in Hardware? -- Where Computer Vision Meets Art (VISART) PHOG-Derived Aesthetic Measures Applied to Color Photographs of Artworks, Natural Scenes and Objects -- Wehrli 2.0: An Algorithm for "Tidying up Art" -- Feature Vector Definition for a Decision Tree Based Craquelure Identification in Old Paintings --Computer-Aided Reclamation of Lost Art -- Evaluation of Digital Inpainting Quality in the Context of Artwork Restoration -- Shaping Art

with Art: Morphological Analysis for Investigating Artistic Reproductions -- Artificial Mosaics with Irregular Tiles Based on Gradient Vector Flow -- Identification of Illustrators -- Locally Consistent ToF and Stereo Data Fusion.

## 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 where 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 guest for 3D; benchmarking facial image analysis technologies.