Record Nr. UNINA9910484615103321 Computer Analysis of Images and Patterns: 16th International **Titolo** Conference, CAIP 2015. Valletta, Malta, September 2-4, 2015. Proceedings, Part I / / edited by George Azzopardi, Nicolai Petkov Cham:,: Springer International Publishing:,: Imprint: Springer... Pubbl/distr/stampa 2015 **ISBN** 3-319-23192-8 Edizione [1st ed. 2015.] 1 online resource (XXII, 841 p. 381 illus.) Descrizione fisica Collana Image Processing, Computer Vision, Pattern Recognition, and Graphics; : 9256 004 Disciplina Soggetti Artificial intelligence Application software Computers Database management Information storage and retrieval Optical data processing Artificial Intelligence Information Systems Applications (incl. Internet) Computation by Abstract Devices **Database Management** Information Storage and Retrieval Computer Imaging, Vision, Pattern Recognition and Graphics 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 On-The-Fly Handwriting Recognition using a High-Level Representation -- What is in Front? Multiple-Object Detection and Tracking with Dynamic Occlusion Handling -- Correlating Words -Approaches and Applications -- ExCuSe: Robust Pupil Detection in Real-World Scenarios -- Textured Object Recognition: Balancing Model Robustness and Complexity -- Review of Methods to Predict Social Image Interestingness and Memorability -- Predicting the number of DCT coefficients in the process of seabed data compression --

Recognition of Images Degraded by Gaussian Blur -- Rejecting False

Positives in Video Object Segmentation -- Ground truth Correspondence between nodes to Learn Graph-Matching Edit-Costs -- Recognising Familiar Facial Features In Paintings Belonging to Separate Domains -- Content based image retrieval based on modelling human visual attention -- Tensor-directed Spatial Patch Blending for Pattern-based Inpainting Methods -- A novel image descriptor based on anisotropic Filtering -- A Novel Method for Simultaneous Acquisition of Visible and Near-Infrared Light using a Coded Infrared-Cut Filter -- Scale-Space Clustering on a Unit Hypersphere -- Bokeh Effects Based on Stereo Vision -- Confidence Based Rank Level Fusion for Multimodal Biometric System -- Optical Flow Computation with Locally Quadratic Assumption -- Pose Normalisation for 3D Vehicles -- Multimodal Output Combination for Transcribing Historical Handwritten Documents -- Unsupervised Surface Reflectance Field Multi-Segmenter -- A Dynamic Approach and a New Dataset for Hand Detection in First Person Vision --Segmentation and Labelling of EEG for Brain Computer Interfaces --Wood Veneer Species Recognition using Markovian Textural Features --Performance Analysis of Active Shape Reconstruction of Fractured, Incomplete Skulls -- Content Extraction from Marketing Flyers --Puzzle Approach to Pose Tracking of a Rigid Object in a Multi Camera System -- Adaptive Information Selection in Images: Efficient Naive Bayes -- Nearest Neighbor Classification -- The Brightness Clustering Transform and Locally Contrasting Keypoints -- Feature Evaluation with High-Resolution Images -- Fast re-ranking of visual search results by example selection -- Egomotion Estimation and Reconstruction with Kalman Filters and GPS Integration -- Bundle Adjustment with Implicit Structure Modelling using a Direct Linear Transform -- Efficient extraction of macromolecular complexes from electron tomograms based on reduced representation templates -- Gradients and active contour models for localization of cell membrane in HER2/neu images -- Combination Photometric Stereo Using Compactness of Albedo and Surface Normal in the Presence of Shadows and Specular Reflection --Craniofacial Reconstruction using Gaussian Process Latent Variable Models -- A High-order Depth-based Matching Method for Graphs --On Different Colour Spaces for Medical Colour Image Classification --SIFT Descriptor for Binary Shape Discrimination, Classification and Matching -- Where is My Cup? - Fully Automatic Detection and Recognition of Textureless Objects in Real-World Images -- Automatic differentiation of u- and n-serrated patterns in direct Immune Fluorescence images -- Means of 2D and 3D shapes and their application in anatomical atlas Building -- Optimized NURBS Curves Modelling Using Genetic Algorithm for Mobile Robot Navigation --Robust learning from ortho-diffusion decompositions -- Filter-based Approach for Ornamentation Detection and Recognition in Singing Folk Music -- Vision-Based System for Automatic Detection of Suspicious Objects on ATM -- Towards Ubiquitous Autonomous Driving: The CCSAD Dataset -- Discriminative Local Binary Pattern For Image Feature Extraction -- A Homologically Persistent Skeleton is a fast and robust descriptor of interest points in 2D images -- A k-max Geodesic Distance and its Application in Image Segmentation -- Ground Level Recovery from Terrestrial Laser Scanning Data with the Variably Randomized Iterated Hierarchical Hough Transform -- U3PT: A New Dataset for Unconstrained 3D Pose Tracking Evaluation --Characterization and Distinction Between Closely Related South Slavic Languages on the Example of Serbian and Croatian -- Few-Views Image Reconstruction with SMART and an Allowance for Contrast Structure Shadows -- Gaussian Mixture Model Selection Using Multiple

Random Subsampling with Initialization -- Vectorisation of Sketched Drawings Using Co-occurring Sample Circles -- Robust Contact Lens Detection using Local Phase Quantization and Binary Gabor Pattern -- Low-Dimensional Tensor Principle Component Analysis -- Empirical study of audio-visual features fusion for gait recognition -- Web User Interact Task Recognition based on Conditional Random Fields -- Tree log identification based on digital cross-section images of log ends using Fingerprint and iris recognition methods -- Detecting Human Falls: A Vision-FSM Approach -- Trademark Image Retrieval Using Inverse Total Feature Frequency and Multiple Detectors -- Adaptive Graph Learning for Unsupervised Feature Selection -- Shot and scene detection via hierarchical clustering for re-using broadcast video -- Locally adapted gain control for reliable foreground detection -- Fourier Features For Person Detection in Depth Data.

Sommario/riassunto

The two volume set LNCS 9256 and 9257 constitutes the refereed proceedings of the 16th International Conference on Computer Analysis of Images and Patterns, CAIP 2015, held in Valletta, Malta, in September 2015. The 138 papers presented were carefully reviewed and selected from numerous submissions. CAIP 2015 is the sixteenth in the CAIP series of biennial international conferences devoted to all aspects of computer vision, image analysis and processing, pattern recognition, and related fields.