1. Record Nr. UNISA996465693303316 Computer Analysis of Images and Patterns [[electronic resource]]: 15th **Titolo** International Conference, CAIP 2013, York, UK, August 27-29, 2013, Proceedings, Part II / / edited by Richard Wilson, Edwin Hancock, Adrian Bors, William Smith Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2013 **ISBN** 3-642-40246-1 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (XXII, 583 p. 279 illus.) Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 8048 006.6 Disciplina Optical data processing Soggetti Artificial intelligence Biometrics (Biology) Computer science Computer Imaging, Vision, Pattern Recognition and Graphics Artificial Intelligence **Biometrics** Computer Science, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Table of Contents – Part II Classified-Distance Based Shape Descriptor for Application to Image Retrieval -- A Shape Descriptor Based on Trainable COSFIRE Filters for the Recognition of Handwritten Digits --Supporting Ancient Coin Classification by Image-Based Reverse Side Symbol Recognition -- Eyewitness Face Sketch Recognition Based on Two-Step Bias Modeling -- Weighted Semi-Global Matching and Center-Symmetric Census Transform for Robust Driver Assistance --HandwrittenWord Image Matching Based on Heat Kernel Signature --Wrong Roadway Detection for Multi-lane Roads -- Blind Deconvolution Using Alternating Maximum a Posteriori Estimation with Heavy-Tailed Priors. Focus Fusion with Anisotropic Depth Map Smoothing --

Accurate Fibre Orientation Measurement for Carbon Fibre Surfaces --

Benchmarking GPU-Based Phase Correlation for Homography-Based Registration of Aerial Imagery -- Robustness of Point Feature Detection -- Depth Super-Resolution by Enhanced Shift and Add -- Using Region-Based Saliency for 3D Interest Points Detection -- Accurate 3D Multi-marker Tracking in X-ray Cardiac Sequences Using a Two-Stage Graph Modeling Approach -- 3D Mesh Decomposition Using Protrusion and Boundary Part Detection -- Isometrically Invariant Description of Deformable Objects Based on the Fractional Heat Equation --Discriminant Analysis Based Level Set Segmentation for Ultrasound Imaging -- Region Based Contour Detection by Dynamic Programming -- Sparse Coding and Mid-Level Superpixel-Feature for 0-Graph Based -- Unsupervised Image Segmentation -- Intuitive Large Image Database Browsing Using Perceptual Similarity Enriched by Crowds --Irreversibility Analysis of Feature Transform-Based Cancelable Biometrics -- L Norm Based Solution for Visual Odometry --Matching Folded Garments to Unfolded Templates Using Robust Shape Analysis Techniques -- Multi-scale Image Segmentation Using MSER --Multi-spectral Material Classification in Landscape Scenes Using Commodity Hardware -- Multispectral Stereo Image Correspondence --NLP EAC Recognition by Component Separation in the Eye Region --OPF-MRF: Optimum-Path Forest and Markov Random Fields for Contextual-Based Image Classification -- Orthonormal Diffusion Decompositions of Images for Optical Flow Estimation -- Pairwise Similarity for Line Extraction from Distorted Images -- Plant Leaf Classification Using Color on a Gravitational Approach -- Semiautomatic Image Annotation -- Segmentation of Skin Spectral Images Using Simulated Illuminations -- Robust Visual Object Tracking via Sparse Representation and Reconstruction -- Sphere Detection in Kinect Point Clouds Via the 3D Hough Transform -- Watermark Optimization of 3D Shapes for Minimal Distortion and High Robustness -- Wavelet Network and Geometric Features Fusion Using Belief Functions for 3D Face Recognition -- A Color-Based Selective and Interactive Filter Using Weighted TV -- A Composable Strategy for Shredded Document Reconstruction.- Global-Local Approach to Saliency Detection -- A Moving Average Bidirectional Texture Function Model -- A Multiscale Blob Representation of Mammographic Parenchymal Patterns and Mammographic Risk Assessment --Alternating Optimization for Lambertian Photometric Stereo Model with Unknown Lighting Directions -- An Automated Visual Inspection System for the Classification of the Phases of Ti-6Al-4V Titanium Alloy -- Analysis of Bat Wing Beat Frequency Using Fourier Transform --Automated Ground-Plane Estimation for Trajectory Rectification --Breast Parenchymal Pattern Analysis in Digital Mammography: Associations between Tab'ar and Birads Tissue Compositions -- Color Transfer Based on Earth Mover's Distance and Color Categorization --Empirical Comparison of Visual Descriptors for Multiple Bleeding Spots Recognition in Wireless Capsule Endoscopy Video -- Exploring Interest Points and Local Descriptors for Word Spotting Application on Historical Handwriting Images -- Gravitational Based Texture Roughness for Plant Leaf Identification -- Heterogeneity Index for Directed Graphs -- High-Precision Lens Distortion Correction Using Smoothed Thin Plate Splines -- Identification Using Encrypted Biometrics -- Illumination Effects in Quantitative Virtual Microscopy -- Improving the Correspondence Establishment Based on Interactive Homography Estimation --Interactive Segmentation of Media-Adventitia Border in IVUS -- Kernel Maximum Mean Discrepancy for Region Merging Approach -- Laplacian Derivative Based Regularization for Optical Flow Estimation in Driving Scenario -- Local and Global Statistics-Based Explicit Active Contour

for Weld Defect Extraction in Radiographic Inspection -- Minimum Entropy Models for Laser Line Extraction -- A Convenient and Fast Method of Endoscope Calibration under Surgical Environment -- SAMSLAM: Simulated Annealing Monocular SLAM -- Spatial Patch Blending for Artefact Reduction in Pattern-Based Inpainting Techniques -- Spatio-temporal Support for Range Flow Based Ego-Motion Estimators -- Tracking for Quantifying Social Network of Drosophila Melanogaster -- Virtual Top View: Towards Real-Time Aggregation of Videos to Monitor Large Areas -- Writer Identification in Old Music Manuscripts Using Contour-Hinge Feature and Dimensionality Reduction with an Autoencoder -- Human Action Recognition Using Temporal Segmentation and Accordion Representation -- Effective Diversification for Ambiguous Queries in Social Image Retrieval.

Sommario/riassunto

The two volume set LNCS 8047 and 8048 constitutes the refereed proceedings of the 15th International Conference on Computer Analysis of Images and Patterns, CAIP 2013, held in York, UK, in August 2013. The 142 papers presented were carefully reviewed and selected from 243 submissions. The scope of the conference spans the following areas: 3D TV, biometrics, color and texture, document analysis, graph-based methods, image and video indexing and database retrieval, image and video processing, image-based modeling, kernel methods, medical imaging, mobile multimedia, model-based vision approaches, motion analysis, natural computation for digital imagery, segmentation and grouping, and shape representation and analysis.