

1. Record Nr.	UNINA9910483926003321
Titolo	Image Analysis and Recognition : 12th International Conference, ICIAR 2015, Niagara Falls, ON, Canada, July 22-24, 2015, Proceedings // edited by Mohamed Kamel, Aurélio Campilho
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-20801-2
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (XVIII, 543 p. 247 illus.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 9164
Disciplina	006.37
Soggetti	Optical data processing Artificial intelligence Pattern recognition Computer graphics Biometrics (Biology) Application software Image Processing and Computer Vision Artificial Intelligence Pattern Recognition Computer Graphics Biometrics 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	Modelling of Subjective Radiological Assessments with Objective Image Quality Measures of Brain and Body CT Images -- Blind Image Quality Assessment Through Wakeby Statistics Model -- Improving Image Quality of Tiled Displays -- Structural Similarity-Based Optimization Problems with L1-Regularization: Smoothing Using Mollifiers -- Improved Non-Local Means Algorithm Based on Dimensionality Reduction -- Non-local Means for Stereo Image Denoising Using Structural Similarity -- Structural Similarity Optimized Wiener Filter: A Way to Fight Image Noise -- A Real-Time Framework for Detection of

Long Linear Infrastructural Objects in Aerial Imagery -- Structural Representations for Multi-modal Image Registration Based on Modified Entropy -- Attributed Relational Graph-Based Learning of Object Models for Object Segmentation -- Label Fusion for Multi-atlas Segmentation Based on Majority Voting -- An Optimized Selective Encryption for Video Confidentiality -- Near-Lossless PCA-Based Compression of Seabed Surface with Prediction -- Adaptive Weighted Neighbors Lossless Image Coding -- Dimensionality Reduction of Proportional Data Through Data Separation Using Dirichlet Distribution -- Image Categorization Using a Heuristic Automatic Clustering Method Based on Hierarchical Clustering -- Semantic Scene Classification with Generalized Gaussian Mixture Models -- Classification of Tooth Shapes for Human Identification Purposes -- An Experimental Comparison of Selected Simple Shape Descriptors -- Micro Genetic and Evolutionary Feature Extraction: An Exploratory Data Analysis Approach for Multispectral Iris Recognition -- Biometric Analysis of Human Ear Matching Using Scale and Rotation Invariant Feature Detectors -- Mutibiometric System Based on Game Theory -- Head Pose Classification Using a Bidimensional Correlation Filter -- Illumination Robust Facial Feature Detection via Decoupled Illumination and Texture Features -- Posed Facial Expression Detection Using Reflection Symmetry and Structural Similarity -- Improving the Recognition of Occluded Faces by Means of Two-Dimensional Orthogonal Projection into Local Subspaces -- Hybrid Age Estimation Using Facial Images -- Unsupervised Sub-graph Selection and Its Application in Face Recognition Techniques -- Dynamic Perceptual Attribute-Based Hidden Conditional Random Fields for Gesture Recognition -- The Bag of Micro-Movements for Human Activity Recognition -- An Efficient Method for Extracting Key-Frames from 3D Human Joint Locations for Action Recognition -- A Simple View-Based Software Architecture for an Autonomous Robot Navigation System -- A Comparison of Feature Detectors and Descriptors in RGB-D SLAM Methods -- Accuracy Improvement for Depth from Small Irregular Camera Motions and Its Performance Evaluation. Fast and Robust Algorithm for Fundamental Matrix Estimation -- Biologically-Inspired Supervised Vasculature Segmentation in SLO Retinal Fundus Images -- Assessment of Retinal Vascular Changes Through Arteriolar-to-Venular Ratio Calculation -- Automatic Segmentation of Vertebrae in Ultrasound Images -- Towards an Automatic Clinical Classification of Age-Related Macular Degeneration -- Optical Flow Based Approach for Automatic Cardiac Cycle Estimation in Ultrasound Images of the Carotid -- Statistical Textural Distinctiveness in Multi-Parametric Prostate MRI for Suspicious Region Detection -- Automatic Detection of Immunogold Particles from Electron Microscopy Images -- Specular Reflectance Suppression in Endoscopic Imagery via Stochastic Bayesian Estimation -- Characterization of Medical Images Using Edge Density and Local Directional Pattern (LDP) -- Angiography Images for Transcatheter Aortic Valve Implantation Patients -- Retinal Blood Vessels Differentiation for Calculation of Arterio-Venous Ratio -- Graph Structuring of Skeleton Object for Its High-Level Exploitation -- Vehicle Detection Using Approximation of Feature Pyramids in the DFT Domain -- Real-Time Speed-Limit Sign Detection and Recognition Using Spatial Pyramid Feature and Boosted Random Forest -- Automatic Nacre Thickness Measurement of Tahitian Pearls -- Automated Wheat Disease Classification Under Controlled and Uncontrolled Image Acquisition -- Color Space Identification for Image Display -- Application of the General Shape Analysis in Determining the Class of Binary Object Silhouettes in the Video Surveillance System -- Speedy Character Line

Detection Algorithm Using Image Block-Based Histogram Analysis -- Detecting Parked Vehicles in Static Images Using Simple Spectral Features in the 'SM4Public' System -- Road Detection in Urban Areas Using Random Forest Tree-Based Ensemble Classification -- Application of the Polar–Fourier Greyscale Descriptor to the Automatic Traffic Sign Recognition -- Camera-Based Lane Marking Detection for ADAS and Autonomous Driving -- Handling Inter-object Occlusion for Multi-object Tracking Based on Attraction Force Constraint -- Indian Sign Language Recognition Using Kinect Sensor -- Automatic Planning of Minimally Invasive Aortic Valve Replacement Surgery.

Sommario/riassunto

This book constitutes the thoroughly refereed proceedings of the 12th International Conference on Image Analysis and Recognition, ICIAR 2015, held in Niagara Falls, ON, Canada, in July 2015. The 55 revised full papers and 5 short papers presented were carefully reviewed and selected from 80 submissions. The papers are organized in the following topical sections: image quality assessment; image enhancement; image segmentation, registration and analysis; image coding, compression and encryption; dimensionality reduction and classification; biometrics; face description, detection and recognition; human activity recognition; robotics and 3D vision; medical image analysis; and applications.
