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Titolo	Advanced Concepts for Intelligent Vision Systems : 12th International Conference, ACIVS 2010, Sydney, Australia, December 13-16, 2010, Proceedings, Part I // edited by Jacques Blanc-Talon, Don Bone, Wilfried Philips, Dan Popescu, Paul Scheunders
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Altri autori (Persone)	Blanc-Talon Jacques <1962->
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Image Processing and Analysis -- A Criterion of Noisy Images Quality -- Subjective Evaluation of Image Quality Measures for White Noise Distorted Images -- Real-Time Retrieval of Near-Duplicate Fragments in Images and Video-Clips -- Toward the Detection of Urban Infrastructure's Edge Shadows -- Neural Image Thresholding Using

SIFT: A Comparative Study -- Statistical Rail Surface Classification Based on 2D and 2 1/2D Image Analysis -- Salient-SIFT for Image Retrieval -- Combined Retrieval Strategies for Images with and without Distinct Objects -- Spectral Matching Functions and Ellipse Mappings in Search for More Uniform Chromaticity and Color Spaces -- Anatomy-Based Registration of Isometrically Transformed Surfaces Using Geodesic Area Functionals -- Trabecular Bone Anisotropy Characterization Using 1D Local Binary Patterns -- Segmentation and Edge Detection -- Watershed Based Document Image Analysis -- A Fast External Force Field for Parametric Active Contour Segmentation -- The Extraction of Venation from Leaf Images by Evolved Vein Classifiers and Ant Colony Algorithms -- Segmentation of Inter-neurons in Three Dimensional Brain Imagery -- Noise-Robust Method for Image Segmentation -- High Definition Feature Map for GVF Snake by Using Harris Function -- Adaptive Constructive Polynomial Fitting -- Long-Range Inhibition in Reaction-Diffusion Algorithms Designed for Edge Detection and Stereo Disparity Detection -- An Edge-Sensing Universal Demosaicing Algorithm -- A New Perceptual Edge Detector in Color Images -- Combining Geometric Edge Detectors for Feature Detection -- Canny Edge Detection Using Bilateral Filter on Real Hexagonal Structure -- Automated Segmentation of Endoscopic Images Based on Local Shape-Adaptive Filtering and Color Descriptors -- 3D and Depth -- Dense Stereo Matching from Separated Views of Wide-Baseline Images -- Modeling Wavelet Coefficients for Wavelet Subdivision Transforms of 3D Meshes -- 3D Surface Reconstruction Using Structured Circular Light Patterns -- Computing Saliency Map from Spatial Information in Point Cloud Data -- A Practical Approach for Calibration of Omnidirectional Stereo Cameras -- Surface Reconstruction of Wear in Carpets by Using a Wavelet Edge Detector -- Augmented Reality with Human Body Interaction Based on Monocular 3D Pose Estimation -- Fusing Large Volumes of Range and Image Data for Accurate Description of Realistic 3D Scenes -- Design of a Real-Time Embedded Stereo Smart Camera -- Optimal Trajectory Space Finding for Nonrigid Structure from Motion -- Fast Depth Saliency from Stereo for Region-Based Artificial Visual Attention -- Algorithms and Optimisations -- A Caustic Approach of Panoramic Image Analysis -- Projection Selection Algorithms for Discrete Tomography -- Fast Mean Shift Algorithm Based on Discretisation and Interpolation -- Learning to Adapt: A Method for Automatic Tuning of Algorithm Parameters -- Pseudo-morphological Image Diffusion Using the Counter-Harmonic Paradigm -- Non-maximum Suppression Using Fewer than Two Comparisons per Pixel -- Hit-or-Miss Transform in Multivariate Images -- Topological SLAM Using Omnidirectional Images: Merging Feature Detectors and Graph-Matching -- Constraint Optimisation for Robust Image Matching with Inhomogeneous Photometric Variations and Affine Noise.

Sommario/riassunto

This volume collects the papers accepted for presentation at the 12th International Conference on "Advanced Concepts for Intelligent Vision Systems" (ACIVS 2010). Following the first meeting in Baden-Baden (Germany) in 1999, which was part of a large multiconference, the ACIVS conference then developed into an independent scientific event and has ever since maintained the tradition of being a single track conference. ACIVS 2010 attracted computer scientists from 29 different countries, mostly from Europe, Australia, and the USA, but also from Asia. Although ACIVS is a conference on all areas of image and video processing, submissions tend to gather within certain major fields of interest. This year 3D and depth processing and computer vision and surveillance were popular topics. Noteworthy are the growing number

of papers related to theoretical developments. We would like to thank the invited speakers Mubarak Shah (University of Central Florida), Richard Kleihorst (VITO, Belgium), Richard Hartley (Australian National University), and David Suter (Adelaide University) for their valuable contributions.
