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Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 3691
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contour Tracking Using Modified Canny Edge Maps with Level-of-Detail -- Moment Invariants for Recognizing Symmetric Objects -- A Linear Algorithm for Polygonal Approximations of Thick Curves -- NMF with LogGabor Wavelets for Visualization -- A Study on Fast Iris Image Acquisition Method -- Automatic Human Model Generation -- An Illumination Invariant Face Recognition Approach Using Exemplar-Based Synthesis Technique -- A Phase Correlation Approach to Active Vision -- A Novel Verification Criterion for Distortion-Free Fingerprints -- Nonparametric Fingerprint Deformation Modelling -- Outdoor Image Classification Using Artificial Immune Recognition System (AIRS) with Performance Evaluation by Fuzzy Resource Allocation Mechanism --

Statistical Approach to Boar Semen Head Classification Based on Intracellular Intensity Distribution -- 3D Triangular Mesh Parametrization Using Locally Linear Embedding -- Variational Analysis of Spherical Images -- Iterative Stereo Reconstruction from CCD-Line Scanner Images -- Content-Based Image Retrieval Using Color and Pattern Histogram Adaptive to Block Classification Characteristics -- Commute Times for Graph Spectral Clustering -- A New Approach to Camera Image Indexing -- Discrete Average of Two-Dimensional Shapes -- Coupled Statistical Face Reconstruction -- Recovery of Surface Height Using Polarization from Two Views -- F SVC: A New Fully Scalable Video Codec -- Eigenspaces from Seriated Graphs -- A Predictive Direction Guided Fast Motion Estimation Algorithm -- Toward Polygonalisation of Thick Discrete Arcs -- A Segmentation Algorithm for Noisy Images -- Finding the Number of Clusters for Nonparametric Segmentation -- Optical Flow Diffusion with Robustified Kernels -- Stereo Vision Based Localization of Free Parking Site -- Data Fusion for Photorealistic 3D Models -- Virtualized Real Object Integration and Manipulation in an Augmented Scene -- Automatic Detection of Spiculated Masses Using Fractal Analysis in Digital Mammography -- Hybrid Framework for Medical Image Segmentation -- Evolving Spanning Trees Using the Heat Equation -- Design of Statistical Measures for the Assessment of Image Segmentation Schemes -- Re-lighting and Compensation for Face Images -- Shape from Silhouettes in Discrete Space -- Multiple Feature Domains Information Fusion for Computer-Aided Clinical Electromyography -- Color Transfer Using Motion Estimations and Its Application to Video Compression -- Minimum-Length Polygons of First-Class Simple Cube-Curves -- Combining Character Level Classifier and Probabilistic Lexicons in Handwritten Word Recognition -- Comparative Analysis of Methods -- Preprocessing Convex Polygons Using Range Trees for Recognition with Few Finger Probes -- Separable Linear Classifiers for Online Learning in Appearance Based Object Detection -- The Randomized Hough Transform for Spherical Images -- Computerized Extraction of Craniofacial Anatomical Structures for Orthodontic Analysis -- Stability of the Eigenvalues of Graphs -- 3D Modeling of Humans with Skeletons from Uncalibrated Wide Baseline Views -- Magnitude and Phase Spectra of Foot Motion for Gait Recognition -- Advances in Background Updating and Shadow Removing for Motion Detection Algorithms -- Sequential Coordinate-Wise Algorithm for the Non-negative Least Squares Problem -- Recognition of Partially Occluded and Deformed Binary Objects -- InfoBoost for Selecting Discriminative Gabor Features -- Computer Vision Based System for Interactive Cooperation of Multiple Users -- Supervised Texture Detection in Images -- Filter Selection and Identification Similarity Using Clustering Under Varying Illumination -- Method for Automatically Segmenting the Spinal Cord and Canal from 3D CT Images -- Vehicle Area Segmentation Using Grid-Based Feature Values -- Improvement of a Temporal Video Index Produced by an Object Detector -- Multi-camera Person Tracking in a Cluttered Interaction Environment -- Improvement of a Person Labelling Method Using Extracted Knowledge on Costume -- Face Modeling and Adaptive Texture Mapping for Model Based Video Coding -- Multispectral Integration for Segmentation of Chromosome Images -- Bit-Rate Control Algorithm for ROI Enabled Video Coding -- Classification of Moving Humans Using Eigen-Features and Support Vector Machines -- A Queue Based Algorithm for Order Independent Anchored Skeletonisation -- Morphological Refinement of an Image Segmentation -- Pattern Analysis of Movement Behavior of Medaka (*Oryzias latipes*):

A Decision Tree Approach -- Linear Algorithm and Hexagonal Search
 Based Two-Pass Algorithm for Motion Estimation -- Designing
 Mathematical Morphology Algorithms on FPGAs: An Application to
 Image Processing -- Object Detection in Multi-channel and Multi-scale
 Images Based on the Structural Tensor -- Evaluating Minimum
 Spanning Tree Based Segmentation Algorithms -- Feature Space
 Reduction for Face Recognition with Dual Linear Discriminant Analysis
 -- On the Design of Reliable Graph Matching Techniques for Change
 Detection -- Extraction of 3D Vascular Tree Skeletons Based on the
 Analysis of Connected Components Evolution -- Color-Contrast
 Landmark Detection and Encoding in Outdoor Images -- Global Color
 Image Features for Discrete Self-localization of an Indoor Vehicle --
 Application of Automatic Image Registration in a Segmentation
 Framework of Pelvic CT Images -- A New Snake Model Robust on
 Overlap and Bias Problems in Tracking a Moving Target --
 Neighborhood Decomposition of 3D Convex Structuring Elements for
 Morphological Operations -- Domain Knowledge Extension with
 Pictorially Enriched Ontologies -- Segmentation via Graph-Spectral
 Methods and Riemannian Geometry -- A Practical Guide to Marker
 Based and Hybrid Visual Registration for AR Industrial Applications --
 Pattern Selective Image Fusion for Multi-focus Image Reconstruction --
 Fast Pixel Classification by SVM Using Vector Quantization, Tabu Search
 and Hybrid Color Space -- CamShift-Based Tracking in Joint Color-
 Spatial Spaces -- A Robust Detector for Distorted Music Staves --
 Illusory Surface Perception Using a Hierarchical Neural Network Model
 of the Visual Pathways -- A Robust Digital Watermarking Adopting 2D
 Barcode -- 4D Reconstruction of Coronary Arteries from Monoplane
 Angiograms -- Temporal Video Indexing Based on Early Vision Using
 Laguerre Filters -- Comparative Study of 3D Face Acquisition
 Techniques -- A Fuzzy Hierarchical Attributed Graph Approach for
 Handwritten Hieroglyphs Description -- Adaptive Fuzzy Text
 Segmentation in Images with Complex Backgrounds Using Color and
 Texture -- Neighborhood Sequences and Their Applications in the
 Digital Image Processing -- Viseme Classification for Talking Head
 Application -- New Algorithms for Example-Based Super-Resolution --
 Determination of Fabric Viscosity Parameters Using Iterative
 Minimization -- Efficient Off-Line Verification and Identification of
 Signatures by Multiclass Support Vector Machines -- Motion-Based
 Hierarchical Active Contour Model for Deformable Object Tracking --
 Multi-modal Face Tracking in Multi-camera Environments -- Facial
 Features Detection by Coefficient Distribution Map -- Region Based
 Detection of Occluded People for the Tracking in Video Image
 Sequences -- Virtual Garment Pre-positioning -- Real-Time Topology
 Modification for Finite Element Models with Haptic Feedback -- A
 Hierarchical Face Behavior Model for a 3D Face Tracking Without
 Markers.

Sommario/riassunto

This volume presents the proceedings of the 11th International
 Conference on Computer Analysis of Images and Patterns (CAIP 2005).
 This conference series started about 20 years ago in Berlin. Initially, the
 conference served as a forum for meetings between scientists from
 Western and Eastern-block countries. Nowadays, the conference attracts
 participants from all over the world. The conference gives equal weight
 to posters and oral presentations, and the selected presentation mode
 is based on the most appropriate communication medium. The
 program follows a single-track format, rather than parallel sessions.
 Non-overlapping oral and poster sessions ensure that all attendees
 have the opportunity to interact personally with presenters. As for the
 numbers, we received a total of 185 submissions. All papers were

reviewed by two to four members of the Program Committee. The final selection was carried out by the Conference Chairs. Out of the 185 papers, 65 were selected for oral presentation and 43 as posters. CAIP is becoming well recognized internationally, and this year's presentations came from 26 different countries. South Korea proved to be the most active scientifically with a total of 16 accepted papers. At this point, we wish to thank the Program Committee and additional referees for their timely and high-quality reviews. The paper submission and review procedure was carried out electronically. We also thank the invited speakers Reinhardt Koch and Thomas Vetter for kindly accepting to present invited papers.
