

1. Record Nr.	UNISA996466145303316
Titolo	Image Analysis and Processing [[electronic resource]] : 8th International Conference, ICIAP '95, San Remo, Italy, September 13 - 15, 1995. Proceedings // edited by Carlo Braccini, Leila DeFloriani, Gianni Vernazza
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1995
ISBN	3-540-44787-3
Edizione	[1st ed. 1995.]
Descrizione fisica	1 online resource (XXI, 767 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 974
Disciplina	006.4/2
Soggetti	Signal processing Image processing Speech processing systems Pattern recognition Optical data processing Computer graphics Artificial intelligence Software engineering Signal, Image and Speech Processing Pattern Recognition Image Processing and Computer Vision Computer Graphics Artificial Intelligence Software Engineering/Programming and Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Texture analysis: Representation and matching -- Region-based segmentation of textured images -- A new approach to image segmentation -- Using Hopfield networks to segment color images -- The watershed transformation for multiresolution image segmentation -- Bounds on the optimal elasticity parameters for a snake -- Efficient attributed graph matching and its application to image analysis --

Matching Delaunay graphs -- An integrated approach to grouping and matching -- An adaptive reject option for LVQ classifiers -- A model based method for characterization and location of curved image features -- Estimation of curvature and tangent direction by median filtered differencing -- Adaptive elimination of false edges for first order detectors -- An image processing library based on abstract image data-types in C++ -- Spatial-temporal data management for a 3D graphical information system -- Photopix: An object-oriented framework for digital image processing systems -- Data packing vs processing speed on low-cost massively parallel systems: A case study -- A new parallel method based on a genetic approach for determination and classification of skin spots -- A VLSI scalable processor array for motion estimation -- Evaluating digital angles by a parallel diffusion process -- A pyramidal approach to convex hull and filling algorithms -- A code based approach to image-processing teaching -- A visual speech model based on fuzzy-neuro methods -- Edge detection filters based on artificial neural networks -- Use of cortical filters and neural networks in a self-organising image classification system -- Occluded objects recognition using multiscale features and Hopfield neural networks -- Automatic video segmentation through editing analysis -- Image retrieval by elastic matching of user sketches -- Finding facial features using an HLS colour space -- A new and fast real-time implementation of 2-D DCT -- A hybrid lossless compression of still images using Markov model and linear prediction -- The impact of aliasing and quantization on motion compensation -- Rule-based method for tumor recognition in liver ultrasonic images -- An understanding of muscle fibre images -- A new plant cell image segmentation algorithm -- Extraction of tumours from MR images of the brain by texture and clustering -- Automatic identification of brain contours in magnetic resonance images of the head -- Analysis of the spatial arrangement of cells in the proliferative breast lesions -- Application of image processing in neurobiology: Detection of low signals with high spatial resolution and a non-uniform variance -- Computer assisted analysis of echocardiographic image sequences -- Tissue segmentation in MRI as an informative indicator of disease activity in the brain -- Analysis of scenes containing multiple non-polyhedral 3D objects -- Fuzzy segmentation and astronomical images interpretation -- Learning how to find patterns or objects in complex scenes -- Adaptive matching using object modes generated from photometric stereo images -- Sensor planning techniques and active visual inspection -- Experimental self-calibration from four views -- Vision-based navigation in service robotics -- Segmenting 3D objects into geons -- Delineation of elongated sub-patterns in a piecewise constant foreground -- On a new basic concept and topological invariant -- Line moments and invariants for real time processing of vectorized contour data -- Restoration of noisy underwater acoustic images using Markov Random Fields -- Plausibilistic preprocessing of sparse range images -- Segmentation/reconstruction of range images based on piecewise-linear approximation -- In-place covariance operators for computer vision -- A new heuristic search for boundary detection -- Sub-pixel registration for super high resolution image acquisition based on temporal integration -- Robust features for textures in additive noise -- Decomposing contours into curves of different families -- A proposal on local and adaptive determination of filter scale for edge detection -- On the detection of step edges in algorithms based on gradient vector analysis -- Directions analysis in grey-level images -- An unsupervised and non-parametric Bayesian Image segmentation --

A.I. based image segmentation -- Quality enhancement in image enlargement -- Synthesising objects and scenes using the reverse distance transformation in 2D and 3D -- Texture segmentation using local phase differences in Gabor filtered images -- Disparity estimation for stereo sequences based on adaptive size hierarchical block matching -- Matching of stereo curves — A closed form solution -- Multi-polygonal object tracking -- Optimal parameter estimation of ellipses -- A linear discriminator of width -- Binarization of inhomogeneously illuminated images -- Pruning discrete and semicontinuous skeletons -- On commutative properties of halftoning and their applications -- Combining resolution and granularity for pattern recognition -- Line and cell searching in tables or forms -- Describing words by graphs -- Selecting reference signatures for on-line signature verification -- ApOFIS: an A priori optical font identification system -- Extracting words and multi-part symbols in graphics rich documents -- A semi-automatic method for form layout description -- Improving the use of contours for off-line Cursive Script Segmentation -- A method for determining address format in the automated sorting of Japanese mail -- Structural features by MCR expression for printed Arabic character recognition -- Genetic algorithm for thinning gray-scale images of characters -- Blue-print document analysis for color classification -- Document image analysis: What is missing? -- Invariant features for HMM based on-line handwriting recognition -- A robust analytical approach for handwritten word recognition -- Recognition of rotated characters by inexact matching -- Bayesian image reconstruction using a high-order interacting MRF model -- Minimum spanning trees (MST) as a tool for describing tissue architecture when grading bladder carcinoma -- Symbolic indexing of cardiological sequences through dynamic curve representations -- Visual communications -- Generalized square isometries — an improvement for fractal image coding -- A fast algorithm for high quality vector quantization codebook design -- Fast fractal image coding using pyramids -- Hidden MRF detection of motion of objects with uniform brightness -- Motion analysis and segmentation for object-oriented mid-level image representation -- Speckle noise filtering in SAR images using wavelets -- Prediction of short-term evolution of cloud formations based on Meteosat image sequences -- Prototyping of interactive satellite image analysis tools using a real-time data-flow computer -- Simulation of aircraft images for Airport Surface Traffic Control -- Cooperation of knowledge based systems for galaxy classification -- Fuzzy segmentation and structural knowledge for satellite image analysis -- Detection of Lofar lines -- A fast object orientation estimation and recognition technique for underwater acoustic imaging -- Applying contextual constraints to extract symbolic representation for image understanding -- Application of the Hough transform for weld inspection underwater -- Development of an automated bond verification system for advanced electronic packages -- Crack detection by a measure of texture anisotropy -- A vision system for automatic inspection of meat quality.

Sommario/riassunto

This book presents the proceedings of the 8th International Conference on Image Analysis and Processing, ICIAP '95, held in Sanremo, Italy in September 1995 under the sponsorship of the International Association of Pattern Recognition IAPR. The volume presents 108 papers selected from more than 180 submissions together with six invited contributions. The papers are written by a total of 265 contributing authors and give a comprehensive state-of-the-art report on all current issues of image analysis and processing. Theoretical aspects are addressed as well as systems design and advanced applications,

particularly in medical imaging.
