1. Record Nr. UNINA9910484507403321

Titolo	Graphics Recognition. Ten Years Review and Future Perspectives : 6th International Workshop, GREC 2005, Hong Kong, China, August 25-26, 2005, Revised Selected Papers / / edited by Wenyin Liu, Josep Lladós
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-34712-7
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (XII, 428 p.)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 3926
Altri autori (Persone)	LiuWenyin LladosJosep <1968->
Disciplina	006.4/2
Soggetti	Computer vision Pattern recognition systems Application software Computer graphics Artificial intelligence Computer science - Mathematics Discrete mathematics Computer Vision Automated Pattern Recognition Computer and Information Systems Applications Computer Graphics Artificial Intelligence Discrete Mathematics in Computer Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"IAPR"--Cover.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Engineering Drawings Vectorization and Recognition -- Vectorization and Parity Errors -- A Vectorization System for Architecture Engineering Drawings -- Symbol Recognition -- Musings on Symbol Recognition -- Symbol Spotting in Technical Drawings Using Vectorial Signatures -- A Generic Description of the Concept Lattices' Classifier: Application to Symbol Recognition -- An Extended System for Labeling Graphical Documents Using Statistical Language Models -- Symbol

Recognition Combining Vectorial and Statistical Features -- Graphic Image Analysis -- Segmentation and Retrieval of Ancient Graphic Documents -- A Method for 2D Bar Code Recognition by Using Rectangle Features to Allocate Vertexes -- Region-Based Pattern Generation Scheme for DMD Based Maskless Lithography -- Global Discrimination of Graphic Styles -- Recognition for Ocular Fundus Based on Shape of Blood Vessel -- Adaptive Noise Reduction for Engineering Drawings Based on Primitives and Noise Assessment -- Structural Document Analysis -- Extraction of Index Components Based on Contents Analysis of Journal's Scanned Cover Page -- Crosscheck of Passport Information for Personal Identification -- String Extraction Based on Statistical Analysis Method in Color Space -- Interactive System for Origami Creation -- Using Bags of Symbols for Automatic Indexing of Graphical Document Image Databases -- A Minimal and Sufficient Way of Introducing External Knowledge for Table Recognition in Archival Documents -- Database-Driven Mathematical Character Recognition -- Recognition and Classification of Figures in PDF Documents -- Sketching and On-Line Graphics Recognition -- An Incremental Parser to Recognize Diagram Symbols and Gestures Represented by Adjacency Grammars -- Online Composite Sketchy Shape Recognition Using Dynamic Programming -- Usinga Neighbourhood Graph Based on Voronoï Tessellation with DMOS, a Generic Method for Structured Document Recognition -- Primitive Segmentation in Old Handwritten Music Scores -- Curve and Shape Processing -- Generic Shape Classification for Retrieval -- Polygonal Approximation of Digital Curves Using a Multi-objective Genetic Algorithm -- A Contour Shape Description Method Via Transformation to Rotation and Scale Invariant Coordinates System -- Feature Detection from Illustration of Time-Series Data -- Sketch Parameterization Using Curve Approximation -- Biometric Recognition Based on Line Shape Descriptors -- Reports of Contests -- The Third Report of the Arc Segmentation Contest -- RANVEC and the Arc Segmentation Contest: Second Evaluation -- Optimal Line and Arc Detection on Run-Length Representations -- Report on the Second Symbol Recognition Contest -- Symbol Recognition Using Bipartite Transformation Distance and Angular Distribution Alignment -- Robust Moment Invariant with Higher Discriminant Factor Based on Fisher Discriminant Analysis for Symbol Recognition -- Panel Discussion -- Graphics Recognition: The Last Ten Years and the Next Ten Years.

Sommario/riassunto

This book contains refereed and improved papers presented at the 6th IAPR Workshop on Graphics Recognition (GREC 2005). This year is the tenth anniversary of GREC, which was started in 1995 and has been held every 2 years: GREC 1995 in Penn State University, USA (LNCS Volume 1072, Springer, 1996); GREC 1997 in Nancy, France (LNCS Volume 1389, Springer, 1998); GREC 1999 in Jaipur, India (LNCS Volume 1941, Springer, 2000); GREC 2001 in Kingston, Canada (LNCS Volume 2390, Springer, 2002); and GREC 2003 in Barcelona, Spain (LNCS Volume 3088, Springer, 2004). GREC is the main event of IAPR TC-10 (the Technical Committee on Graphics Recognition within the International Association for Pattern Recognition) and provides an excellent opportunity for researchers and practitioners at all levels of experience to meet colleagues and to share new ideas and knowledge about graphics recognition methods. Graphics recognition is a particular field in the domain of document analysis, which combines pattern recognition and image processing techniques for the analysis of any kind of graphical information in documents from either paper or electronic formats. In its 10 year history, the graphics recognition community has extended its research topics from the analysis and

understanding of graphic documents (including engineering drawings vectorization and recognition), to graphics-based information retrieval and symbol recognition, to new media analysis, and even stepped into research areas of other communities, e. g.