

1. Record Nr.	UNISA996466031003316
Titolo	Graphics Recognition. Recent Advances [[electronic resource]] : Third International Workshop, GREC'99 Jaipur, India, September 26-27, 1999 Selected Papers // edited by Atul K. Chhabra, Dov Dori
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2000
ISBN	3-540-40953-X
Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (XII, 352 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1941
Disciplina	006.42
Soggetti	Pattern recognition Optical data processing Computer graphics Artificial intelligence Algorithms Pattern Recognition Image Processing and Computer Vision Computer Graphics Artificial Intelligence Algorithm Analysis and Problem Complexity
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 at the end of each chapters and index.
Nota di contenuto	Vectorization -- Stable and Robust Vectorization: How to Make the Right Choices -- A Really Useful Vectorization Algorithm -- Processing of the Connected Shapes in Raster-to-Vector Conversion Process -- Maps and Geographic Documents -- Recognition in Maps and Geographic Documents: Features and Approach -- Interpretation of Geographic Vector-Data in Practice -- Compound Regulated Morphological Operations and Their Application to the Analysis of Line-Drawings -- Detection of Black Point Houses on the Large Size Scanned Topographic Map -- Recognition of Connective Relationship among House Blocks from House Maps -- Graphic Document Analysis -- A Tabular Survey of Automated Table Processing -- Model-Based

Graphics Recognition -- A Client-Server Architecture for Document Image Recognition -- Multi-Dimensional Interval Algebra with Symmetry for Describing Block Layouts -- Identification of Person Objects in Four-Scenes Comics of Japanese Newspapers -- Graphic Symbol and Shape Recognition -- Symbol and Shape Recognition -- Synthesis of Representative Graphical Symbols by Computing Generalized Median Graph -- Deformable Template Matching within a Bayesian Framework for Hand-Written Graphic Symbol Recognition -- A Symbol Classifier Able to Reject Wrong Shapes for Document Recognition Systems -- A Robust Shape Decomposition Method -- A Structural Representation Adapted to Handwritten Symbol Recognition -- Combination of Invariant Pattern Recognition Primitives on Technical Documents -- Engineering Drawing Database Retrieval Using Statistical Pattern Spotting Techniques -- Graphics-Based Retrieval of Color Image Databases Using Hand-Drawn Query Sketches -- A Simple Approach to Recognise Geometric Shapes Interactively -- Engineering Drawings and Schematics -- Syntactic and Semantic Graphics Recognition: The Role of the Object-Process Methodology -- Efficient Categorization of 3D Edges from 2D Projections -- Automatic Interpretation of Construction Structure Drawings -- Automated Analysis of Scanned Ducting Diagrams -- Performance Evaluation -- Performance Evaluation of Document Image Algorithms -- Edit Cost Index as a Measure of Performance of Graphics Recognition Systems -- Cost Evaluation of Interactively Correcting Recognized Engineering Drawings -- Impact of Sparse Pixel Vectorization Algorithm Parameters on Line Segmentation Performance.

Sommario/riassunto

This edited volume contains refereed and improved versions of select papers that were presented at the third IAPR Workshop on Graphics Recognition (GREC'99), held at Rambagh Palace in Jaipur, India, 26–27, September 1999. The workshop was organized by the TC10 (Technical Committee on Graphics Recognition) of the IAPR. Edited volumes from the previous two workshops in this series are also available as Lecture Notes in Computer Science (volumes 1072 and 1389). Graphics recognition is the study of techniques for computer interpretation of images of line drawings and symbols. This includes methods such as vectorization, symbol recognition, and table and chart recognition for applications such as engineering drawings, schematics, logic drawings, maps, diagrams, and musical scores. Some recently developed techniques include graphics-based information or drawing retrieval and recognition of online graphical strokes. With the recent advances in the field, there is now a need to develop benchmarks for evaluating and comparing algorithms and systems. Graphics recognition is a growing field of interest in the broader document image recognition community. The GREC'99 workshop was attended by forty-five people from fifteen countries. The workshop program consisted of six technical sessions. Each session began with a half-hour invited talk which was followed by several short talks. Each session closed with a half-hour panel discussion where the authors fielded questions from the other participants. Several interesting new research directions were discussed at the workshop.
