Record Nr. UNISA996465632103316 Advances in Structural and Syntactical Pattern Recognition [[electronic **Titolo** resource]]: 6th International Workshop, SSPR' 96, Leipzig, Germany, August, 20 - 23, 1996, Proceedings / / edited by Petra Perner, Patrick Wang, Azriel Rosenfeld Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1996 **ISBN** 3-540-70631-3 Edizione [1st ed. 1996.] Descrizione fisica 1 online resource (X, 426 p.) Collana Lecture Notes in Computer Science, , 0302-9743;; 1121 Disciplina 006.4 Soggetti Pattern recognition Optical data processing Artificial intelligence Pattern Recognition Image Processing and Computer Vision Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Efficient recognition of a class of context-sensitive languages described by Augmented Regular Expressions -- Optimal and information theoretic syntactic pattern recognition for traditional errors -- The morphic generator grammatical inference methodology and multilayer perceptrons: A hybrid approach to acoustic modeling -- Two different approaches for cost-efficient Viterbi parsing with error correction -- Bounded parallelism in array grammars used for character recognition -- Comparison between the Inside-Outside algorithm and the Viterbi algorithm for stochastic context-free grammars --Generalized morphological operators applied to map-analysis --Derivatives in scale space -- On skeletonization in 4D images --Extended Cascade-Correlation for syntactic and structural pattern recognition -- A metric of planar self-similar forms -- Including geometry in graph representations: A quadratic-time graph

isomorphism algorithm and its applications -- Hierarchical discrete

relaxation -- Relational indexing -- An evidential merit function to quide search in a semantic network based image analysis system --Inexact graph matching with genetic search -- Automatic recognition of bidimensional models learned by grammatical inference in outdoor scenes -- Signal decomposition with multiscale learning algorithms --Structural learning of character patterns for on-line recognition of handwritten Japanese characters -- Recognition of hand-printed characters using induct machine learning -- Opponent color processing based on neural models -- Knowledge acquisition by symbolic decision tree induction for interpretation of digital images in radiology --Invariants and fixed structures lead the way to change -- Representing shape by line patterns -- Recognition of 3D objects from 2D images — Some issues -- Surface skeletonization of volume objects --Peculiarities of structural analysis of image contours under various orders of scanning -- A structural analysis of curve deformation by discontinuous transformations -- Three dimensional computer vision for computer aided design and manufacturing applications -- Using weighted minutiae for fingerprint identification -- Recognizing 2-D rigid and non-rigid wire-shapes -- Structural and syntactic methods in line drawing analysis: To which extent do they work? -- Vector-based segmentation of text connected to graphics in engineering drawings --Automatic resolution of object features from engineering drawings for 3D reconstruction -- The feedback approach to cartographic areal text placement -- A hierarchical representation for the reference database of on-line Chinese character recognition -- Substructure shape analysis for Kanji character recognition -- Recognition of hand-printed Chinese characters using Ripple Down Rules -- A fuzzy syntactic method for on-line handwriting recognition.

Sommario/riassunto

This book constitutes the refereed proceedings of the 6th International Workshop on Structural and Syntactical Pattern Recognition, SSPR '96, held in Leipzig, Germany in August 1996. The 36 revised full papers included together with three invited papers were carefully selected from a total of 52 submissions. The papers are organized in topical sections on grammars and languages; morphology and mathematical approaches to pattern recognition; semantic nets, relational models and graph-based methods; 2D and 3D shape recognition; document image analysis and recognition; and handwritten and printed character recognition.