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Nota di contenuto	Rough Sets: Trends, Challenges, and Prospects -- Keynote Papers -- To What Extent Can Computers Aid Human Activity? Toward Second Phase Information Technology -- Rough Sets and Decision Algorithms -- Toward a Perception-Based Theory of Probabilistic Reasoning -- Special Session:Granular Computing -- Situation Identification by Unmanned Aerial Vehicle -- Rough-Neuro Computing -- Approximation of Information Granule Sets -- Probabilistic Inference and Bayesian Theorem on Rough Sets -- Interpreting Fuzzy Membership Functions in the Theory of Rough Sets -- Rough Sets and

Systems -- Dynamic System Visualization with Rough Performance
Maps -- Approximation Spaces of Type-Free Sets -- RSES and RSESLib -
A Collection of Tools for Rough Set Computations -- An Investigation
of γ -Reduct Selection within the Variable Precision Rough Sets Model --
Application of Discernibility Tables to Calculation of Approximate
Frequency Based Reducts -- Scalable Feature Selection Using Rough Set
Theory -- On Algorithm for Constructing of Decision Trees with
Minimal Number of Nodes -- Rough Set-Based Dimensionality
Reduction for Multivariate Adaptive Regression Splines -- Rough, and
Fuzzy-Rough Classification Methods Implemented in RClass System --
Rough Set Approach to Decisions under Risk -- Variable Consistency
Model of Dominance-Based Rough Sets Approach -- Approximations
and Rough Sets Based on Tolerances -- A Rough Set Approach to
Inductive Logic Programming -- Classification of Infinite Information
Systems -- Some Remarks on Extensions and Restrictions of
Information Systems -- Valued Tolerance and Decision Rules -- A
Conceptual View of Knowledge Bases in Rough Set Theory -- Fuzzy
Sets and Systems -- Computer Vision Using Fuzzy Logic for Robot
Manipulator -- On Fuzzy Lattice -- Fuzzy-Logic-Based Adaptive
Control for a Class of Nonlinear Discrete-Time System -- Conditional
Probability Relations in Fuzzy Relational Database -- A New Class of
Necessity Measures and Fuzzy Rough Sets Based on Certainty
Qualifications -- A Fuzzy Approach for Approximating Formal
Concepts -- On Axiomatic Characterizations of Fuzzy Approximation
Operators -- Rough Sets and Data Mining -- LEM3 Algorithm
Generalization Based on Stochastic Approximation Space -- Using the
Apriori Algorithm to Improve Rough Sets Results -- An Application for
Knowledge Discovery Based on a Revision of VPRS Model -- An
Algorithm for Induction of Decision Rules Consistent with the
Dominance Principle -- Data Mining for Monitoring Loose Parts in
Nuclear Power Plants -- Supervised Learning: A Generalized Rough Set
Approach -- Unification of Knowledge Discovery and Data Mining using
Rough Sets Approach in A Real-World Application -- The Application of
a Distance Learning Algorithm in Web-Based Course Delivery --
Searching Decision Rules in Very Large Databases Using Rough Set
Theory -- On Efficient Construction of Decision Trees From Large
Databases -- An Approach to Statistical Extension of Rough Set Rule
Induction -- The Inconsistency in Rough Set Based Rule Generation --
Machine Learning and Data Mining -- A Comparison of Several
Approaches to Missing Attribute Values in Data Mining -- Discovering
Motiv Based Association Rules in a Set of DNA Sequences -- Inducing
Theory for the Rule Set -- Some Basics of a Self Organizing Map (SOM)
Extended Model for Information Discovery in a Digital Library Context
-- Handling Data with Plural Sources in Databases -- Research Topics
Discovery from WWW by Keywords Association Rules -- Temporal
Templates and Analysis of Time Related Data -- Constraint Based
Incremental Learning of Classification Rules -- A Hybrid Model for Rule
Discovery in Data -- Non-classical Logics and Reasoning -- Rough Sets
in Approximate Spatial Reasoning -- A Study of Conditional
Independence Change in Learning Probabilistic Network -- γ -Level
Rough Equality Relation and the Inference of Rough Paramodulation --
Annotated Semantics for Defeasible Deontic Reasoning -- Spatial
Reasoning via Rough Sets -- Decomposition of Boolean Relations and
Functions in Logic Synthesis and Data Analysis -- Diagnostic Reasoning
from the viewpoint of Rough Sets -- Rough Set Approach to CBR --
Rough Sets for Uncertainty Reasoning -- Pattern Recognition and Image
Processing -- Feature Subset Selection by Neuro-rough Hybridization
-- Accurate Estimation of Motion Vectors using Active Block Matching

-- Anytime Algorithm for Feature Selection -- Reconstruction in an Original Video Sequence of the Lost Region Occupied by Caption Areas -- Determining Influence of Visual Cues on the Perception of Surround Sound Using Soft Computing -- Application of normalized decision measures to the new case classification -- An Application of Rough Sets and Haar Wavelets to Face Recognition -- Detecting Spots for NASA Space Programs Using Rough Sets -- Solving the Localization-Detection Trade-Off in Shadow Recognition Problem Using Rough Sets -- Neural Networks and Genetic Algorithms -- A Modular Neural Network For Vague Classification -- Evolutionary Parsing for a Probabilistic Context Free Grammar -- The Application of Genetic Programming in Milk Yield Prediction for Dairy Cows -- Localization of Sound Sources by Means of Recurrent Neural Networks -- Towards Rough Neural Computing Based on Rough Membership Functions: Theory and Application -- The Nature of Crossover Operator in Genetic Algorithms -- The Behavior of the Complex Integral Neural Network -- Current Trends in Computing -- On Trace Assertion Method of Module Interface Specification with Concurrency -- A Proposal for Including Behavior in the Process of Object Similarity Assessment with Examples from Artificial Life -- How Can Help an Inductive Approach in the Resolution of a Problematic ? Problem? -- A Timed Petri Net Interpreter: An Alternative Method for Simulation -- An Agent-Based Soft Computing Society.

Sommario/riassunto

This book constitutes the thoroughly refereed post-proceedings of the Second International Conference on Rough Sets and Current Trends in Computing, RSCTC 2000, held in Banff, Canada in October 2000. The 80 revised papers presented together with an introduction and three keynote presentations have gone through two rounds of reviewing and revision. The papers are organized in topical sections on granular computing, rough sets and systems, fuzzy sets and systems, rough sets and data mining, nonclassical logics and reasoning, pattern recognition and image processing, neural networks and genetic algorithms, and current trends in computing.
