1. Record Nr. UNISA996466243003316 Rough Sets, Fuzzy Sets, Data Mining and Granular Computing **Titolo** [[electronic resource]]: 11th International Conference, RSFDGrC 2007. Toronto, Canada, May 14-16, 2007 / / edited by Aijun An, Jerzy Stefanowski, Sheela Ramanna, Cory Butz, Witold Pedrycz Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2007 **ISBN** 3-540-72530-X Edizione [1st ed. 2007.] Descrizione fisica 1 online resource (XIV, 588 p.) Collana Lecture Notes in Artificial Intelligence;; 4482 Disciplina 006.3 Soggetti Computers Artificial intelligence Data mining Database management Mathematical logic Theory of Computation Artificial Intelligence Data Mining and Knowledge Discovery **Database Management** Mathematical Logic and Formal Languages Computation by Abstract Devices Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Invited Papers -- Toward Rough-Granular Computing -- Data Clustering Algorithms for Information Systems -- From Parallel Data Mining to Grid-Enabled Distributed Knowledge Discovery -- A New Algorithm for Attribute Reduction in Decision Tables -- Fuzzy-Rough Hybridization -- Algebraic Properties of Adjunction-Based Fuzzy Rough Sets -- Fuzzy Approximation Operators Based on Coverings --Information-Theoretic Measure of Uncertainty in Generalized Fuzzy Rough Sets -- Determining Significance of Attributes in the Unified Rough Set Approach -- A Rough-Hybrid Approach to Software Defect

Classification -- Vaguely Quantified Rough Sets -- Fuzzy Sets -- A

Fuzzy Search Engine Weighted Approach to Result Merging for Metasearch -- A Fuzzy Group Decision Approach to Real Option Valuation -- Fuzzifying Closure Systems and Fuzzy Lattices --Evolution of Fuzzy System Models: An Overview and New Directions --Retracted Article: A New Cluster Validity Index for Fuzzy Clustering Based on Similarity Measure -- A New Classifier Design with Fuzzy Functions -- Soft Computing in Medical Image Processing -- Image Analysis of Ductal Proliferative Lesions of Breast Using Architectural Features -- Nucleus Segmentation and Recognition of Uterine Cervical Pap-Smears -- A Study: Segmentation of Lateral Ventricles in Brain MRI Using Fuzzy C-Means Clustering with Gaussian Smoothing -- Ischemic Stroke Modeling: Multiscale Extraction of Hypodense Signs -- Soft Computing in Information Retrieval -- Supporting Literature Exploration with Granular Knowledge Structures -- Ordinal Credibility Coefficient – A New Approach in the Data Credibility Analysis --FuzzyPR: An Effective Passage Retrieval System for QAS -- Clustering -- Parallel Artificial Immune Clustering Algorithm Based on Granular Computing -- C-DBSCAN: Density-Based Clustering with Constraints -- A New Cluster Based Fuzzy Model Tree for Data Modeling --Parameter Tuning for Disjoint Clusters Based on Concept Lattices with Application to Location Learning -- Text and Web Mining -- Web Document Classification Based on Rough Set -- Transformation of Suffix Arrays into Suffix Trees on the MPI Environment -- Clustering High Dimensional Data Using SVM -- Learning, Data Mining and Rough Classifiers -- Constructing Associative Classifier Using Rough Sets and Evidence Theory -- Evaluation Method for Decision Rule Sets -- On Possible Rules and Apriori Algorithm in Non-deterministic Information Systems: Part 2 -- Neonatal Infection Diagnosis Using Constructive Induction in Data Mining -- Two Families of Classification Algorithms -- Constructing Associative Classifiers from Decision Tables --Evaluating Importance of Conditions in the Set of Discovered Rules --Constraint Based Action Rule Discovery with Single Classification Rules -- Data Confidentiality Versus Chase -- Relationship Between Loss Functions and Confirmation Measures -- High Frequent Value Reduct in Very Large Databases -- A Weighted Rough Set Approach for Cost-Sensitive Learning -- Jumping Emerging Pattern Induction by Means of Graph Coloring and Local Reducts in Transaction Databases --Visualization of Rough Set Decision Rules for Medical Diagnosis Systems -- Attribute Generalization and Fuzziness in Data Mining Contexts -- A Hybrid Method for Forecasting Stock Market Trend Using Soft-Thresholding De-noise Model and SVM -- Granular Computing --Attribute Granules in Formal Contexts -- An Incremental Updating Algorithm for Core Computing in Dominance-Based Rough Set Model -- A Ranking Approach with Inclusion Measure in Multiple-Attribute Interval-Valued Decision Making -- Granulations Based on Semantics of Rough Logical Formulas and Its Reasoning -- A Categorial Basis for Granular Computing -- Granular Sets - Foundations and Case Study of Tolerance Spaces -- Soft Computing in Multimedia Processing --Unusual Activity Analysis in Video Sequences -- Task-Based Image Annotation and Retrieval -- Improvement of Moving Image Quality on AC-PDP by Rough Set Based Dynamic False Contour Reduction --Image Digital Watermarking Technique Based on Kernel Independent Component Analysis -- Image Pattern Recognition Using Near Sets --Robotic Target Tracking with Approximation Space-Based Feedback During Reinforcement Learning -- Soft Computing Applications -- Web Based Health Recommender System Using Rough Sets, Survival Analysis and Rule-Based Expert Systems -- RBF Neural Network Implementation of Fuzzy Systems: Application to Time Series Modeling -- Selecting

Samples and Features for SVM Based on Neighborhood Model -- Intelligent Decision Support Based on Influence Diagrams with Rough Sets -- Object Class Recognition Using SNoW with a Part Vocabulary -- Coverage in Biomimetic Pattern Recognition -- A Texture-Based Algorithm for Vehicle Area Segmentation Using the Support Vector Machine Method -- Rough and Complex Concepts -- The Study of Some Important Theoretical Problems for Rough Relational Database -- Interval Rough Mereology for Approximating Hierarchical Knowledge -- Description Logic Framework for Access Control and Security in Object-Oriented Systems -- Rough Neural Networks for Complex Concepts.

## Sommario/riassunto

This volume contains the papers selected for presentation at the 11th Int- national Conference on Rough Sets, Fuzzy Sets, Data Mining, and Granular Computing (RSFDGrC 2007), a part of the Joint Rough Set Symposium (JRS 2007) organized by Infobright Inc. and York University. JRS 2007 was held for the ?rst time during May 14–16, 2007 in MaRS Discovery District, Toronto, Canada. It consisted of two conferences: RSFDGrC 2007 and the Second Int- national Conference on Rough Sets and Knowledge Technology (RSKT 2007). The two conferences that constituted JRS 2007 investigated rough sets as an emerging methodology established more than 25 years ago by Zdzis law Pawlak. Roughsettheoryhasbecomeanintegralpartofdiversehybridresearchstrea ms. In keeping with this trend, JRS 2007 encompassed rough and fuzzy sets, kno- edgetechnologyanddiscovery, softandgranular computing, dataprocessing and mining, while maintaining an emphasis on foundations and applications. RSFDGrC 2007 followed in the footsteps of well-established international initiatives devoted to the dissemination of rough sets research, held so far in Canada, China, Japan, Poland, Sweden, and the USA. RSFDGrC was ?rst - ganized as the 7th International Workshop on Rough Sets, Data Mining and Granular Computing held in Yamaguchi, Japan in 1999. Its key feature was to stress the role of integrating intelligent information methods to solve real-world, large, complex problems concerned with uncertainty and fuzziness. RSFDGrC achieved the status of a bi-annual international conference, starting from 2003 in Chongqing, China.