1. Record Nr. UNISA996465298003316 Principles of data mining and knowledge discovery: Third European **Titolo** Conference, PKDD '99, Prague, Czech Republic, September 15-18, 1999 : proceedings / / Jan M. Zlytkow, Jan Rauch (editors) Berlin, Germany:,: Springer,, [1999] Pubbl/distr/stampa ©1999 **ISBN** 3-540-48247-4 Edizione [1st ed. 1999.] Descrizione fisica 1 online resource (XIV, 593 p.) Collana Lecture Notes in Artificial Intelligence;; 1704 Disciplina 006.3 Soggetti Data mining Database searching Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Session 1A - Time Series -- Scaling up Dynamic Time Warping to Nota di contenuto Massive Datasets -- The Haar Wavelet Transform in the Time Series Similarity Paradigm -- Rule Discovery in Large Time-Series Medical Databases -- Session 1B - Applications -- Simultaneous Prediction of Multiple Chemical Parameters of River Water Quality with TILDE --Applying Data Mining Techniques to Wafer Manufacturing -- An Application of Data Mining to the Problem of the University Students' Dropout Using Markov Chains -- Session 2A - Taxonomies and Partitions -- Discovering and Visualizing Attribute Associations Using Bayesian Networks and Their Use in KDD -- Taxonomy Formation by Approximate Equivalence Relations, Revisited -- On the Use of Self-Organizing Maps for Clustering and Visualization -- Speeding Up the Search for Optimal Partitions -- Session 2B - Logic Methods --Experiments in Meta-level Learning with ILP -- Boolean Reasoning Scheme with Some Applications in Data Mining -- On the Correspondence between Classes of Implicational and Equivalence Quantifiers -- Querying Inductive Databases via Logic-Based User-

Defined Aggregates -- Session 3A - Distributed and Multirelational Databases -- Peculiarity Oriented Multi-database Mining -- Knowledge Discovery in Medical Multi-databases: A Rough Set Approach --

Automated Discovery of Rules and Exceptions from Distributed Databases Using Aggregates -- Session 3B - Text Mining and Feature Selection -- Text Mining via Information Extraction -- TopCat: Data Mining for Topic Identification in a Text Corpus -- Selection and Statistical Validation of Features and Prototypes -- Session 4A - Rules and Induction -- Taming Large Rule Models in Rough Set Approaches -- Optimizing Disjunctive Association Rules -- Contribution of Boosting in Wrapper Models -- Experiments on a Representation-Independent "Top-Down and Prune" Induction Scheme -- Session 5A -Interesting and Unusual -- Heuristic Measures of Interestingness --Enhancing Rule Interestingness for Neuro-fuzzy Systems --Unsupervised Profiling for Identifying Superimposed Fraud -- OPTICS-OF: Identifying Local Outliers -- Posters -- Selective Propositionalization for Relational Learning -- Circle Graphs: New Visualization Tools for Text-Mining -- On the Consistency of Information Filters for Lazy Learning Algorithms -- Using Genetic Algorithms to Evolve a Rule Hierarchy -- Mining Temporal Features in Association Rules -- The Improvement of Response Modeling: Combining Rule-Induction and Case-Based Reasoning -- Analyzing an Email Collection Using Formal Concept Analysis -- Business Focused Evaluation Methods: A Case Study -- Combining Data and Knowledge by MaxEnt-Optimization of Probability Distributions -- Handling Missing Data in Trees: Surrogate Splits or Statistical Imputation? --Rough Dependencies as a Particular Case of Correlation: Application to the Calculation of Approximative Reducts -- A Fuzzy Beam-Search Rule Induction Algorithm -- An Innovative GA-Based Decision Tree Classifier in Large Scale Data Mining -- Extension to C-means Algorithm for the Use of Similarity Functions -- Predicting Chemical Carcinogenesis Using Structural Information Only -- LA - A Clustering Algorithm with an Automated Selection of Attributes, Which is Invariant to Functional Transformations of Coordinates -- Association Rule Selection in a Data Mining Environment -- Multi-relational Decision Tree Induction --Learning of Simple Conceptual Graphs from Positive and Negative Examples -- An Evolutionary Algorithm Using Multivariate Discretization for Decision Rule Induction -- ZigZag, a New Clustering Algorithm to Analyze Categorical Variable Cross-Classification Tables -- Efficient Mining of High Confidence Association Rules without Support Thresholds -- A Logical Approach to Fuzzy Data Analysis --AST: Support for Algorithm Selection with a CBR Approach -- Efficient Shared Near Neighbours Clustering of Large Metric Data Sets --Discovery of "Interesting" Data Dependencies from a Workload of SQL Statements -- Learning from Highly Structured Data by Decomposition -- Combinatorial Approach for Data Binarization -- Extending Attribute-Oriented Induction as a Key-Preserving Data Mining Method -- Automated Discovery of Polynomials by Inductive Genetic Programming -- Diagnosing Acute Appendicitis with Very Simple Classification Rules -- Rule Induction in Cascade Model Based on Sum of Squares Decomposition -- Maintenance of Discovered Knowledge --A Divisive Initialisation Method for Clustering Algorithms -- A Comparison of Model Selection Procedures for Predicting Turning Points in Financial Time Series -- Mining Lemma Disambiguation Rules from Czech Corpora -- Adding Temporal Semantics to Association Rules -- Studying the Behavior of Generalized Entropy in Induction Trees Using a M-of-N Concept -- Discovering Rules in Information Trees -- Mining Text Archives: Creating Readable Maps to Structure and Describe Document Collections -- Neuro-fuzzy Data Mining for Target Group Selection in Retail Banking -- Mining Possibilistic Set-Valued Rules by Generating Prime Disjunctions -- Towards Discovery of Information Granules -- Classification Algorithms Based on Linear Combinations of Features -- Managing Interesting Rules in Sequence Mining -- Support Vector Machines for Knowledge Discovery -- Regression by Feature Projections -- Generating Linguistic Fuzzy Rules for Pattern Classification with Genetic Algorithms -- Tutorials -- Data Mining for Robust Business Intelligence Solutions -- Query Languages for Knowledge Discovery in Databases -- The ESPRIT Project CreditMine and its Relevance for the Internet Market -- Logics and Statistics for Association Rules and Beyond -- Data Mining for the Web -- Relational Learning and Inductive Logic Programming Made Easy.

Sommario/riassunto

This book constitutes the refereed proceedings of the Third European Conference on Principles and Practice of Knowledge Discovery in Databases, PKDD'99, held in Prague, Czech Republic in September 1999. The 28 revised full papers and 48 poster presentations were carefully reviewed and selected from 106 full papers submitted. The papers are organized in topical sections on time series, applications, taxonomies and partitions, logic methods, distributed and multirelational databases, text mining and feature selection, rules and induction, and interesting and unusual issues.