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Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 5255
Classificazione	54.72
Disciplina	501
Soggetti	Artificial intelligence Data mining Database management Information storage and retrieval systems Information technology - Management Social sciences - Data processing Artificial Intelligence Data Mining and Knowledge Discovery Database Management Information Storage and Retrieval Computer Application in Administrative Data Processing Computer Application in Social and Behavioral Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Papers -- On Iterative Algorithms with an Information Geometry Background -- Visual Analytics: Combining Automated Discovery with Interactive Visualizations -- Some Mathematics Behind Graph Property Testing -- Finding Total and Partial Orders from Data for Seriation -- Computational Models of Neural Representations in the Human Brain -- Learning -- Unsupervised Classifier Selection Based on Two-Sample Test -- An Empirical Investigation of the Trade-Off between Consistency and Coverage in Rule Learning Heuristics -- Learning Model Trees from Data Streams -- Empirical Asymmetric Selective

Transfer in Multi-objective Decision Trees -- Ensemble-Trees: Leveraging Ensemble Power Inside Decision Trees -- A Comparison between Neural Network Methods for Learning Aggregate Functions -- Feature Selection -- Smoothed Prediction of the Onset of Tree Stem Radius Increase Based on Temperature Patterns -- Feature Selection in Taxonomies with Applications to Paleontology -- Associations -- Deduction Schemes for Association Rules -- Constructing Iceberg Lattices from Frequent Closures Using Generators -- Discovery Processes -- Learning from Each Other -- Comparative Evaluation of Two Systems for the Visual Navigation of Encyclopedia Knowledge Spaces -- A Framework for Knowledge Discovery in a Society of Agents -- Learning and Chemistry -- Active Learning for High Throughput Screening -- An Efficiently Computable Graph-Based Metric for the Classification of Small Molecules -- Mining Intervals of Graphs to Extract Characteristic Reaction Patterns -- Clustering -- Refining Pairwise Similarity Matrix for Cluster Ensemble Problem with Cluster Relations -- Input Noise Robustness and Sensitivity Analysis to Improve Large Datasets Clustering by Using the GRID -- An Integrated Graph and Probability Based Clustering Framework for Sequential Data -- Cluster Analysis in Remote Sensing Spectral Imagery through Graph Representation and Advanced SOM Visualization -- Structured Data -- Mining Unordered Distance-Constrained Embedded Subtrees -- Finding Frequent Patterns from Compressed Tree-Structured Data -- A Modeling Approach Using Multiple Graphs for Semi-Supervised Learning -- Text Analysis -- String Kernels Based on Variable-Length-Don’t-Care Patterns -- Unsupervised Spam Detection by Document Complexity Estimation -- A Probabilistic Neighbourhood Translation Approach for Non-standard Text Categorisation.

Sommario/riassunto

This book constitutes the refereed proceedings of the 11th International Conference on Discovery Science, DS 2008, held in Budapest, Hungary, in October 2008, co-located with the 19th International Conference on Algorithmic Learning Theory, ALT 2008. The 26 revised long papers presented together with 5 invited papers were carefully reviewed and selected from 58 submissions. The papers address all current issues in the area of development and analysis of methods for intelligent data analysis, knowledge discovery and machine learning, as well as their application to scientific knowledge discovery. The papers are organized in topical sections on learning, feature selection, associations, discovery processes, learning and chemistry, clustering, structured data, and text analysis.