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Collana	Lecture Notes in Artificial Intelligence ; ; 1967
Disciplina	501
Soggetti	Computers Philosophy and science Artificial intelligence Information storage and retrieval Database management Information technology Business—Data processing Theory of Computation Philosophy of Science Artificial Intelligence Information Storage and Retrieval Database Management IT in Business
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Formato	Materiale a stampa
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Invited Papers -- A Survey of Association-Rule Mining -- Degrees of belief, random worlds, and maximum entropy -- Discovery and Deduction -- Regular Papers -- Integrating Information Visualization and Retrieval for Discovering Internet Sources -- A Unifying Approach to HTML Wrapper Representation and Learning -- Discovery of Web Communities Based on the Co-occurrence of References -- Clustering and Visualization of Large Protein Sequence Databases by Means of an

Extension of the Self-Organizing Map -- A Simple Greedy Algorithm for Finding Functional Relations: Efficient Implementation and Average Case Analysis -- Graph-Based Induction for General Graph Structured Data and Its Application to Chemical Compound Data -- Discovering Characteristic Expressions from Literary Works: a New Text Analysis Method beyond N-Gram Statistics and KWIC -- Classifying Scenarios using Belief Decision Trees -- A Practical Algorithm to Find the Best Subsequence Patterns -- On-line Estimation of Hidden Markov Model Parameters -- Computationally Efficient Heuristics for If-Then Rule Extraction from Feed-Forward Neural Networks -- Language Learning with a Neighbor System -- Application of Multivariate Maxwellian Mixture Model to Plasma Velocity Distribution Function -- Knowledge Discovery from fMRI Brain Images by Logical Regression Analysis -- Human Discovery Processes Based on Searching Experiments in Virtual Psychological Research Environment -- Poster Papers -- Prediction of Binding Affinities for Protein-Ligand Complexes with Neural Network Models -- Automatic and Accurate Determination of the Onset Time of the Quasi-periodic Oscillation -- The Role of Choice in Discovery -- Search for New Methods for Assignment of Complex Molecular Spectra -- Computational Analysis for Discovery on the Plasma Waves Observed by Scientific Satellites -- Direction Finding of the Waves in Plasma Using Energy Function -- Coping The Challenge of Mutagenesis Discovery with GUHA+/- for Windows -- Discovering Interpretable Rules that Explain Customers' Brand Choice Behavior -- Mining for 4ft Association Rules -- Rule Discovery Technique Using Genetic Programming Combined with Apriori Algorithm -- Discovery of M-of-N Concepts for Classification -- Issues in Organizing a Successful Knowledge Discovery Contest -- Knowledge Integration of Rule Mining and Schema Discovering -- Discovery of Correlation from Multi-stream of Human Motion -- An Appropriate Abstraction for Constructing a Compact Decision Tree -- Extracting Positive and Negative Keywords for Web Communities -- Nonequilibrium Thermodynamics from Time Series Data Analysis -- Automatic Determination Algorithm for the Optimum Number of States in NL-HMnet -- Comparative Study of Automatic Acquisition Methods of Image Processing Procedures. -- Extraction of Authors' Characteristics from Japanese Modern Sentences via N-gram Distribution -- Combination Retrieval for Creating Knowledge from Sparse Document Collection -- Discovery of Nominally Conditioned Polynomials using Neural Networks, Vector Quantizers and Decision Trees.

## Sommario/riassunto

This volume contains 3 invited papers, 15 regular papers, and 22 poster papers that were selected for presentation at the Third International Conference on Discovery Science (DS 2000), which was held 4-6 December 2000 in Kyoto. The Program Committee selected the contributed papers from 48 submissions. Three distinguished researchers accepted our invitation to present talks: J-frey D. Ullman (Stanford University), Joseph Y. Halpern (Cornell University), and Masami Hagiya (University of Tokyo). The Program Committee would like to thank all those who submitted papers for consideration and the invited speakers. I would like to thank the Program Committee members, the Local Arrangements Committee members, and the Steering Committee members for their splendid and hard work. Finally, special thanks go to the PC Assistant Shoko Suzuki for her assistance in the development of web pages and the preparation of these proceedings. September 2000 Shinichi Morishita Organization Discovery Science 2000 is organized as part of the activities of the Discovery Science Project sponsored by Grant-in-Aid for Scientific Research in the Priority Area from the Ministry of Education, Science,

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