Record Nr. UNISA996465389403316 Progress in Discovery Science [[electronic resource]]: Final Report of **Titolo** the Japanese Discovery Science Project / / edited by Setsuo Arikawa. Ayumi Shinohara Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-45884-0 Edizione [1st ed. 2002.] 1 online resource (XIV, 684 p. 137 illus., 1 illus. in color.) Descrizione fisica Lecture Notes in Artificial Intelligence;; 2281 Collana 006.3 Disciplina Soggetti Artificial intelligence Data structures (Computer science) Database management Information storage and retrieval Mathematical statistics **Algorithms** Artificial Intelligence Data Structures and Information Theory **Database Management** Information Storage and Retrieval Probability and Statistics in Computer Science Algorithm Analysis and Problem Complexity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Searching for Mutual Exclusion Algorithms Using BDDs -- Reducing Search Space in Solving Higher-Order Equations -- The Structure of Scientific Discovery: From a Philosophical Point of View -- Ideal Concepts, Intuitions, and Mathematical Knowledge Acquisitions in Husserl and Hilbert -- Theory of Judgments and Derivations -- Efficient Data Mining from Large Text Databases -- A Computational Model for

> Children's Language Acquisition Using Inductive Logic Programming --Some Criterions for Selecting the Best Data Abstractions -- Discovery

of Chances Underlying Real Data -- Towards the Integration of

Inductive and Nonmonotonic Logic Programming -- EM Learning for Symbolic-Statistical Models in Statistical Abduction --Refutable/Inductive Learning from Neighbor Examples and Its Application to Decision Trees over Patterns -- Constructing a Critical Casebase to Represent a Lattice-Based Relation -- On Dimension Reduction Mappings for Approximate Retrieval of Multi-dimensional Data -- Rule Discovery from fMRI Brain Images by Logical Regression Analysis -- A Theory of Hypothesis Finding in Clausal Logic -- Efficient Data Mining by Active Learning -- Data Compression Method Combining Properties of PPM and CTW -- Discovery of Definition Patterns by Compressing Dictionary Sentences -- On-Line Algorithm to Predict Nearly as Well as the Best Pruning of a Decision Tree -- Finding Best Patterns Practically -- Classification of Object Sequences Using Syntactical Structure -- Top-Down Decision Tree Boosting and Its Applications -- Extraction of Primitive Motion and Discovery of Association Rules from Human Motion Data -- Algorithmic Aspects of Boosting -- Automatic Detection of Geomagnetic Jerks by Applying a Statistical Time Series Model to Geomagnetic Monthly Means --Application of Multivariate Maxwellian Mixture Model to Plasma Velocity Distribution -- Inductive Thermodynamics from Time Series Data Analysis -- Mining of Topographic Feature from Heterogeneous Imagery and Its Application to Lunar Craters -- Application of Neural Network Technique to Combustion Spray Dynamics Analysis --Computational Analysis of Plasma Waves and Particles in the Auroral Region Observed by Scientific Satellite -- A Flexible Modeling of Global Plasma Profile Deduced from Wave Data -- Extraction of Signal from High Dimensional Time Series: Analysis of Ocean Bottom Seismograph Data -- Foundations of Designing Computational Knowledge Discovery Processes -- Computing Optimal Hypotheses Efficiently for Boosting --Discovering Polynomials to Fit Multivariate Data Having Numeric and Nominal Variables -- Finding of Signal and Image by Integer-Type Haar Lifting Wavelet Transform -- In Pursuit of Interesting Patterns with Undirected Discovery of Exception Rules -- Mining from Literary Texts: Pattern Discovery and Similarity Computation -- Second Difference Method Reinforced by Grouping: A New Tool for Assistance in Assignment of ComplexMolecular Spectra -- Discovery of Positive and Negative Knowledge in Medical Databases Using Rough Sets -- Toward the Discovery of First Principle Based Scientific Law Equations -- A Machine Learning Algorithm for Analyzing String Patterns Helps to Discover Simple and Interpretable Business Rules from Purchase History -- Constructing Inductive Applications by Meta-Learning with Method Repositories -- Knowledge Discovery from Semistructured Texts --Packet Analysis in Congested Networks -- Visualization and Analysis of Web Graphs -- Knowledge Discovery in Auto-tuning Parallel Numerical Library -- Extended Association Algorithm Based on ROC Analysis for Visual Information Navigator -- WWW Visualization Tools for Discovering Interesting Web Pages -- Scalable and Comprehensible Visualization for Discovery of Knowledge from the Internet -- Meme Media for Re-editing and Redistributing Intellectual Assets and Their Application to Interactive Virtual Information Materialization.