

1. Record Nr.	UNINA9910484463803321
Titolo	Discovery Science : 10th International Conference, DS 2007 Sendai, Japan, October 1-4, 2007. Proceedings // edited by Vincent Corruble, Masayuki Takeda, Einoshin Suzuki
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2007
ISBN	3-540-75488-1
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (XI, 300 p.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 4755
Disciplina	501
Soggetti	Science - Philosophy Artificial intelligence Database management Information storage and retrieval systems Information technology - Management Social sciences - Data processing Philosophy of Science Artificial Intelligence 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 contenuto	Invited Papers -- Challenge for Info-plosion -- Machine Learning in Ecosystem Informatics -- Simple Algorithmic Principles of Discovery, Subjective Beauty, Selective Attention, Curiosity & Creativity -- A Theory of Similarity Functions for Learning and Clustering -- A Hilbert Space Embedding for Distributions -- Long Papers -- Time and Space Efficient Discovery of Maximal Geometric Graphs -- Iterative Reordering of Rules for Building Ensembles Without Relearning -- On Approximating Minimum Infrequent and Maximum Frequent Sets -- A Partially Dynamic Clustering Algorithm for Data Insertion and Removal

-- Positivism Against Constructivism: A Network Game to Learn Epistemology -- Learning Locally Weighted C4.4 for Class Probability Estimation -- User Preference Modeling from Positive Contents for Personalized Recommendation -- Reducing Trials by Thinning-Out in Skill Discovery -- A Theoretical Study on Variable Ordering of Zero-Suppressed BDDs for Representing Frequent Itemsets -- Fast NML Computation for Naive Bayes Models -- Unsupervised Spam Detection Based on String Alieness Measures -- A Consequence Finding Approach for Full Clausal Abduction -- Literature-Based Discovery by an Enhanced Information Retrieval Model -- Discovering Mentorship Information from Author Collaboration Networks -- Active Contours as Knowledge Discovery Methods -- An Efficient Polynomial Delay Algorithm for Pseudo Frequent Itemset Mining -- Discovering Implicit Feedbacks from Search Engine Log Files -- Regular Papers -- Pharmacophore Knowledge Refinement Method in the Chemical Structure Space -- An Attempt to Rebuild C. Bernard's Scientific Steps -- Semantic Annotation of Data Tables Using a Domain Ontology -- Model Selection and Estimation Via Subjective User Preferences -- Detecting Concept Drift Using Statistical Testing -- Towards Future Technology Projection: A Method for Extracting Capability Phrases from Documents -- Efficient Incremental Mining of Top-K Frequent Closed Itemsets -- An Intentional Kernel Function for RNA Classification -- Mining Subtrees with Frequent Occurrence of Similar Subtrees -- Semantic Based Real-Time Clustering for PubMed Literatures.

## Sommario/riassunto

This volume contains the papers presented at DS-2007: The Tenth International Conference on Discovery Science held in Sendai, Japan, October 1–4, 2007. The main objective of the Discovery Science (DS) conference series is to provide an open forum for intensive discussions and the exchange of new ideas and information among researchers working in the area of automating scientific discovery or working on tools for supporting the human process of discovery in science. It has been a successful arrangement in the past to co-locate the DS conference with the International Conference on Algorithmic Learning Theory (ALT).

This combination of ALT and DS allows for a comprehensive treatment of the whole range, from theoretical investigations to practical applications. Continuing this tradition, DS 2007 was co-located with the 18th ALT conference (ALT 2007). The proceedings of ALT 2007 were published as a twin volume 4754 of the LNCS series. The International Steering Committee of the Discovery Science conference series provided important advice on a number of issues during the planning of Discovery Science 2007. The members of the Steering Committee are Einoshin Suzuki (Kyushu University, Chair), Achim G.