1. Record Nr. UNINA9910483826303321 Discovery science: 9th international conference, DS 2006, Barcelona, Titolo Spain, October 7-10, 2006: proceedings // Ljupco Todorovski, Nada Lavrac, Klaus P. Jantke (eds.) Berlin; New York, : Springer, c2006 Pubbl/distr/stampa 3-540-46493-X **ISBN** [1st ed. 2006.] Edizione Descrizione fisica 1 online resource (XIV, 386 p.) Lecture notes in computer science. Lecture notes in artificial Collana intelligence, . 0302-9743 ; ; 4265 LNCS sublibrary. SL 7, Artificial intelligence Altri autori (Persone) TodorovskiLjupco <1969-> LavracNada JantkeK. P (Klaus P.) 501 Disciplina Soggetti Science - Philosophy Discoveries in science Research - Automation Research - Data processing 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 Invited Papers -- e-Science and the Semantic Web: A Symbiotic Relationship -- Data-Driven Discovery Using Probabilistic Hidden Variable Models -- Reinforcement Learning and Apprenticeship Learning for Robotic Control -- The Solution of Semi-Infinite Linear Programs Using Boosting-Like Methods -- Spectral Norm in Learning Theory: Some Selected Topics -- Long Papers -- Classification of Changing Regions Based on Temporal Context in Local Spatial Association -- Kalman Filters and Adaptive Windows for Learning in Data Streams -- Scientific Discovery: A View from the Trenches --Optimal Bayesian 2D-Discretization for Variable Ranking in Regression -- Text Data Clustering by Contextual Graphs -- Automatic Water Eddy Detection in SST Maps Using Random Ellipse Fitting and Vectorial Fields

for Image Segmentation -- Mining Approximate Motifs in Time Series -- Identifying Historical Period and Ethnic Origin of Documents Using Stylistic Feature Sets -- A New Family of String Classifiers Based on

Local Relatedness -- On Class Visualisation for High Dimensional Data: Exploring Scientific Data Sets -- Mining Sectorial Episodes from Event Sequences -- A Voronoi Diagram Approach to Autonomous Clustering -- Itemset Support Queries Using Frequent Itemsets and Their Condensed Representations -- Strategy Diagram for Identifying Play Strategies in Multi-view Soccer Video Data -- Prediction of Domain-Domain Interactions Using Inductive Logic Programming from Multiple Genome Databases -- Clustering Pairwise Distances with Missing Data: Maximum Cuts Versus Normalized Cuts -- Analysis of Linux Evolution Using Aligned Source Code Segments -- Rule-Based Prediction of Rare Extreme Values -- A Pragmatic Logic of Scientific Discovery -- Change Detection with Kalman Filter and CUSUM -- Automatic Recognition of Landforms on Mars Using Terrain Segmentation and Classification -- A Multilingual Named Entity Recognition System Using Boosting and C4.5 Decision Tree Learning Algorithms -- Model-Based Estimation of Word Saliency in Text -- Regular Papers -- Learning Bayesian Network Equivalence Classes from Incomplete Data -- Interesting Patterns Extraction Using Prior Knowledge -- Visual Interactive Subgroup Discovery with Numerical Properties of Interest -- Contextual Ontological Concepts Extraction -- Experiences from a Socio-economic Application of Induction Trees -- Interpreting Microarray Experiments Via Co-expressed Gene Groups Analysis (CGGA) -- Symmetric Item Set Mining Based on Zero-Suppressed BDDs -- Mathematical Models of Category-Based Induction -- Automatic Construction of Static Evaluation Functions for Computer Game Players -- Databases Reduction Simultaneously by Ordered Projection -- Mapping Ontologies in an Air Pollution Monitoring and Control Agent-Based System --Information Theory and Classification Error in Probabilistic Classifiers -- Checking Scientific Assumptions by Modeling -- Incremental Algorithm Driven by Error Margins -- Feature Construction and ?-Free Sets in 0/1 Samples -- Visual Knowledge Discovery in Paleoclimatology with Parallel Coordinates -- A Novel Framework for Discovering Robust Cluster Results -- Gene Selection for Classifying Microarray Data Using Grey Relation Analysis.

Sommario/riassunto

The 9th International Conference on Discovery Science (DS 2006) was held in Barcelona, Spain, on 7-10 October 2006. The conference was collocated with the 17th International Conference on Algorithmic Learning Theory (ALT 2006). The two conferences shared the invited talks. This LNAI volume, containing the proceedings of the 9th International C- ference on Discovery Science, is structured in three parts. The ?rstpart contains the papers/abstracts of the invited talks, the second part contains the accepted long papers, and the third part the accepted regular (short) papers. Out of 87 submitted papers, 23 were accepted for publication as long papers, and 18 as regular papers. All the submitted papers were reviewed by two or three ref- ees. In addition to the presentations of accepted papers, the DS 2006 conference program consisted of three invited talks, two tutorials, the collocated ALT 2006 conference and the Pascal Dialogues workshop. We wish to express our gratitude to – the authors of submitted papers, - the program committee and other referees for their thorough and timely paper evaluation, - DS 2006 invited speakers Carole Goble and Padhraic Smyth, as well as - drew Ng as joint DS 2006 and ALT 2006 invited speaker, - invited tutorial speakers Luis Torgo and Michael May, - the local organization committee chaired by Ricard Gavalda, ` - DS 2006 conference chair Klaus P.