1. Record Nr. UNINA9910485018703321 Machine learning: ECML 2007: 18th European Conference on Machine **Titolo** Learning, Warsaw, Poland, September 17-21, 2007 : proceedings // edited by Joost N. Kok [and four others] Berlin, Germany;; New York, New York:,: Springer,, [2007] Pubbl/distr/stampa 3-540-74958-6 **ISBN** [1st ed. 2007.] Edizione Descrizione fisica 1 online resource (XXIV, 812 p.) Lecture notes in computer science. Lecture notes in artificial Collana intelligence;4701 006.31 Disciplina Soggetti Machine learning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Invited Talks -- Learning, Information Extraction and the Web --Putting Things in Order: On the Fundamental Role of Ranking in Classification and Probability Estimation -- Mining Queries --Adventures in Personalized Information Access -- Long Papers --Statistical Debugging Using Latent Topic Models -- Learning Balls of Strings with Correction Queries -- Neighborhood-Based Local Sensitivity -- Approximating Gaussian Processes with -Matrices --Learning Metrics Between Tree Structured Data: Application to Image Recognition -- Shrinkage Estimator for Bayesian Network Parameters -- Level Learning Set: A Novel Classifier Based on Active Contour Models -- Learning Partially Observable Markov Models from First Passage Times -- Context Sensitive Paraphrasing with a Global Unsupervised Classifier -- Dual Strategy Active Learning -- Decision Tree Instability and Active Learning -- Constraint Selection by Committee: An Ensemble Approach to Identifying Informative Constraints for Semi-supervised Clustering -- The Cost of Learning Directed Cuts -- Spectral Clustering and Embedding with Hidden

> Markov Models -- Probabilistic Explanation Based Learning -- Graph-Based Domain Mapping for Transfer Learning in General Games --Learning to Classify Documents with Only a Small Positive Training Set

-- Structure Learning of Probabilistic Relational Models from Incomplete Relational Data -- Stability Based Sparse LSI/PCA:

Incorporating Feature Selection in LSI and PCA -- Bayesian Substructure Learning - Approximate Learning of Very Large Network Structures --Efficient Continuous-Time Reinforcement Learning with Adaptive State Graphs -- Source Separation with Gaussian Process Models --Discriminative Sequence Labeling by Z-Score Optimization -- Fast Optimization Methods for L1 Regularization: A Comparative Study and Two New Approaches -- Bayesian Inference for Sparse Generalized Linear Models -- Classifier Loss Under Metric Uncertainty -- Additive Groves of Regression Trees -- Efficient Computation of Recursive Principal Component Analysis for Structured Input -- Hinge Rank Loss and the Area Under the ROC Curve -- Clustering Trees with Instance Level Constraints -- On Pairwise Naive Bayes Classifiers -- Separating Precision and Mean in Dirichlet-Enhanced High-Order Markov Models -- Safe Q-Learning on Complete History Spaces -- Random k-Labelsets: An Ensemble Method for Multilabel Classification -- Seeing the Forest Through the Trees: Learning a Comprehensible Model from an Ensemble -- Avoiding Boosting Overfitting by Removing Confusing Samples -- Planning and Learning in Environments with Delayed Feedback -- Analyzing Co-training Style Algorithms -- Policy Gradient Critics -- An Improved Model Selection Heuristic for AUC -- Finding the Right Family: Parent and Child Selection for Averaged One-Dependence Estimators -- Short Papers -- Stepwise Induction of Multi-target Model Trees -- Comparing Rule Measures for Predictive Association Rules --User Oriented Hierarchical Information Organization and Retrieval --Learning a Classifier with Very Few Examples: Analogy Based and Knowledge Based Generation of New Examples for Character Recognition -- Weighted Kernel Regression for Predicting Changing Dependencies -- Counter-Example Generation-Based One-Class Classification -- Test-Cost Sensitive Classification Based on Conditioned Loss Functions -- Probabilistic Models for Action-Based Chinese Dependency Parsing -- Learning Directed Probabilistic Logical Models: Ordering-Search Versus Structure-Search -- A Simple Lexicographic Ranker and Probability Estimator -- On Minimizing the Position Error in Label Ranking -- On Phase Transitions in Learning Sparse Networks -- Semi-supervised Collaborative Text Classification -- Learning from Relevant Tasks Only -- An Unsupervised Learning Algorithm for Rank Aggregation -- Ensembles of Multi-Objective Decision Trees -- Kernel-Based Grouping of Histogram Data -- Active Class Selection -- Sequence Labeling with Reinforcement Learning and Ranking Algorithms -- Efficient Pairwise Classification -- Scale-Space Based Weak Regressors for Boosting -- K-Means with Large and Noisy Constraint Sets -- Towards 'Interactive' Active Learning in Multi-view Feature Sets for Information Extraction -- Principal Component Analysis for Large Scale Problems with Lots of Missing Values --Transfer Learning in Reinforcement Learning Problems Through Partial Policy Recycling -- Class Noise Mitigation Through Instance Weighting -- Optimizing Feature Sets for Structured Data -- Roulette Sampling for Cost-Sensitive Learning -- Modeling Highway Traffic Volumes --Undercomplete Blind Subspace Deconvolution Via Linear Prediction --Learning an Outlier-Robust Kalman Filter -- Imitation Learning Using Graphical Models -- Nondeterministic Discretization of Weights Improves Accuracy of Neural Networks -- Semi-definite Manifold Alignment -- General Solution for Supervised Graph Embedding --Multi-objective Genetic Programming for Multiple Instance Learning --Exploiting Term, Predicate, and Feature Taxonomies in Propositionalization and Propositional Rule Learning.

The two premier annual European conferences in the areas of machine learning and data mining have been collocated ever since the ?rst joint

conference in Freiburg, 2001. The European Conference on Machine Learning (ECML) traces its origins to 1986, when the ?rst European Working Session on Learning was held in Orsay, France. The European Conference on Principles and Practice of KnowledgeDiscoveryinDatabases(PKDD) was? rstheldin1997inTrondheim, Norway. Over the years, the ECML/PKDD series has evolved into one of the largest and most selective international conferences in machine learning and data mining. In 2007, the seventh collocated ECML/PKDD took place during September 17–21 on the centralcampus of WarsawUniversityand in the nearby Staszic Palace of the Polish Academy of Sciences. The conference for the third time used a hierarchical reviewing process. We nominated 30 Area Chairs, each of them responsible for one sub-?eld or several closely related research topics. Suitable areas were selected on the basis of the submission statistics for ECML/PKDD 2006 and for last year's International Conference on Machine Learning (ICML 2006) to ensure a proper load balance amongtheAreaChairs. AjointProgramCommittee(PC)wasnominatedforthe two conferences, consisting of some 300 renowned researchers, mostly proposed by the Area Chairs. This joint PC, the largest of the series to date, allowed us to exploit synergies and deal competently with topic overlaps between ECML and PKDD. ECML/PKDD 2007 received 592 abstract submissions. As in previous years, toassistthereviewersandtheAreaChairsintheir? nalrecommendationauthors had the opportunity to communicate their feedback after the reviewing phase.