1. Record Nr. UNISA996466162403316

Titolo	Learning Theory [[electronic resource]] : 18th Annual Conference on Learning Theory, COLT 2005, Bertinoro, Italy, June 27-30, 2005, Proceedings / / edited by Peter Auer, Ron Meir
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XII, 692 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 3559
Disciplina	006.3
Soggetti	Artificial intelligence Computers Algorithms Mathematical logic Artificial Intelligence Computation by Abstract Devices Algorithm Analysis and Problem Complexity Mathematical Logic and Formal Languages
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	Learning to Rank -- Ranking and Scoring Using Empirical Risk Minimization -- Learnability of Bipartite Ranking Functions -- Stability and Generalization of Bipartite Ranking Algorithms -- Loss Bounds for Online Category Ranking -- Boosting -- Margin-Based Ranking Meets Boosting in the Middle -- Martingale Boosting -- The Value of Agreement, a New Boosting Algorithm -- Unlabeled Data, Multiclass Classification -- A PAC-Style Model for Learning from Labeled and Unlabeled Data -- Generalization Error Bounds Using Unlabeled Data -- On the Consistency of Multiclass Classification Methods -- Sensitive Error Correcting Output Codes -- Online Learning I -- Data Dependent Concentration Bounds for Sequential Prediction Algorithms -- The Weak Aggregating Algorithm and Weak Mixability -- Tracking the Best of Many Experts -- Improved Second-Order Bounds for Prediction with Expert Advice -- Online Learning II -- Competitive Collaborative

Learning -- Analysis of Perceptron-Based Active Learning -- A New Perspective on an Old Perceptron Algorithm -- Support Vector Machines -- Fast Rates for Support Vector Machines -- Exponential Convergence Rates in Classification -- General Polynomial Time Decomposition Algorithms -- Kernels and Embeddings -- Approximating a Gram Matrix for Improved Kernel-Based Learning -- Learning Convex Combinations of Continuously Parameterized Basic Kernels -- On the Limitations of Embedding Methods -- Leaving the Span -- Inductive Inference -- Variations on U-Shaped Learning -- Mind Change Efficient Learning -- On a Syntactic Characterization of Classification with a Mind Change Bound -- Unsupervised Learning -- Ellipsoid Approximation Using Random Vectors -- The Spectral Method for General Mixture Models -- On Spectral Learning of Mixtures of Distributions -- From Graphs to Manifolds – Weak and Strong Pointwise Consistency of Graph Laplacians -- Towards a Theoretical Foundation for Laplacian-Based Manifold Methods -- Generalization Bounds -- Permutation Tests for Classification -- Localized Upper and Lower Bounds for Some Estimation Problems -- Improved Minimax Bounds on the Test and Training Distortion of Empirically Designed Vector Quantizers -- Rank, Trace-Norm and Max-Norm -- Query Learning, Attribute Efficiency, Compression Schemes -- Learning a Hidden Hypergraph -- On Attribute Efficient and Non-adaptive Learning of Parities and DNF Expressions -- Unlabeled Compression Schemes for Maximum Classes -- Economics and Game Theory -- Trading in Markovian Price Models -- From External to Internal Regret -- Separation Results for Learning Models -- Separating Models of Learning from Correlated and Uncorrelated Data -- Asymptotic Log-Loss of Prequential Maximum Likelihood Codes -- Teaching Classes with High Teaching Dimension Using Few Examples -- Open Problems -- Optimum Follow the Leader Algorithm -- The Cross Validation Problem -- Compute Inclusion Depth of a Pattern.

Sommario/riassunto

This volume contains papers presented at the Eighteenth Annual Conference on Learning Theory (previously known as the Conference on Computational Learning Theory) held in Bertinoro, Italy from June 27 to 30, 2005. The technical program contained 45 papers selected from 120 submissions, 3 open problems selected from among 5 contributed, and 2 invited lectures. The invited lectures were given by Sergiu Hart on “Uncoupled Dynamics and Nash Equilibrium”, and by Satinder Singh on “Rethinking State, Action, and Reward in Reinforcement Learning”. These papers were not included in this volume. The Mark Fulk Award is presented annually for the best paper co-authored by a student. The student selected this year was Hadi Salmasian for the paper titled “The Spectral Method for General Mixture Models” co-authored with Ravindran Kannan and Santosh Vempala. The number of papers submitted to COLT this year was exceptionally high. In addition to the classical COLT topics, we found an increase in the number of submissions related to novel classi?cation scenarios such as ranking. This - crease re?ects a healthy shift towards more structured classi? cation problems, which are becoming increasingly relevant to practitioners.