Preface

This volume contains papers presented at the joint 16th Annual Conference on Learning Theory (COLT) and the 7th Annual Workshop on Kernel Machines, held in Washington, DC, USA, during August 24–27, 2003. COLT, which recently merged with EuroCOLT, has traditionally been a meeting place for learning theorists. We hope that COLT will benefit from the collocation with the annual workshop on kernel machines, formerly held as a NIPS postconference workshop.

The technical program contained 47 papers selected from 92 submissions. All 47 papers were presented as posters; 22 of the papers were additionally presented as talks. There were also two target areas with invited contributions. In *computational game theory*, a tutorial entitled "Learning Topics in Game-Theoretic Decision Making" was given by Michael Littman, and an invited paper on "A General Class of No-Regret Learning Algorithms and Game-Theoretic Equilibria" was contributed by Amy Greenwald. In *natural language processing*, a tutorial on "Machine Learning Methods in Natural Language Processing" was presented by Michael Collins, followed by two invited talks, "Learning from Uncertain Data" by Mehryar Mohri and "Learning and Parsing Stochastic Unification-Based Grammars" by Mark Johnson.

In addition to the accepted papers and invited presentations, we solicited short open problems that were reviewed and included in the proceedings. We hope that reviewed open problems might become a new tradition for COLT. Our goal was to select simple signature problems whose solutions are likely to inspire further research. For some of the problems the authors offered monetary rewards. Yoav Freund acted as the open problem area chair. The open problems were presented as posters at the conference.

The Mark Fulk award is presented annually for the best paper contributed by a student. This year's award was won by Ulrike von Luxburg for the paper "Distance-Based Classification with Lipschitz Functions" (co-authored with Olivier Bousquet). Owing to generous support from the Journal of Machine Learning, we were able to award two second prizes for the best student paper. They went to Gilles Stoltz, "Internal Regret in On-line Portfolio Selection" (co-authored with Gabor Lugosi), and Petra Philips, "Random Subclass Bounds" (co-authored with Shahar Mendelson).

We thank all the people and organizations who helped make this conference successful. We are especially grateful to the program committee for their efforts in evaluating and selecting the papers in this volume:

Kristin Bennett	Rensselaer Polytechnic Institute
Avrim Blum	Carnegie Mellon University
Nicolò Cesa-Bianchi	University of Milan
Nello Cristianini	University of California at Davis
Yoav Freund	Banter Inc.
Michael Kearns	University of Pennsylvania
Efim Kinber	Sacred Heart University, Fairfield, CT
Vladimir Koltchinskii	The University of New Mexico
Yishay Mansour	Tel Aviv University
Rob Schapire	Princeton University

The program committee solicited the help of the following reviewers. We obtained at least two independent reviews for each paper in addition to the reviews and discussions carried out by the program committee:

Naoki Abe	Rusins Freivalds	Wolfgang Merkle
Dana Angluin	Nir Friedman	Jochen Nessel
Peter Auer	Bill Gasarch	Kamal Nigam
Peter Bartlett	Claudio Gentile	Noam Nisan
Satinder Baveja	Sally Goldman	Bill Noble
Jonathan Baxter	Geoff Gordon	Luis Ortiz
Amos Beimel	Thore Graepel	Dmitry Panchenko
Shai Ben-David	Peter Grunwald	Relu Patrascu
Yoshua Bengio	Patrick Haffner	John Platt
Gilles Blanchard	Lisa Hellerstein	Gunnar Rätsch
Stephane Boucheron	Jeff Jackson	Vijay Raghavan
Olivier Bousquet	Thorsten Joachims	Dana Ron
Nader Bshouty	Adam Kalai	Roman Rosipal
Chris Burges	Jaz Kandola	Dale Schuurmans
Colin Campbell	Balazs Kegl	Rocco Servedio
Rafael Carrasco	Jyrki Kivinen	John Shawe-Taylor
John Case	John Lafferty	Yoram Singer
Moses Charikar	Gert Lanckriet	Bob Sloan
Alex Conconi	John Langford	Frank Stephan
Sanjoy Dasgupta	Christina Leslie	Christino Tamon
Tijl DeBie	Chi-jen Lin	Koji Tsuda
Nigel Duffy	Philip Long	Alexandre Tsybakov
Pierre Dupont	Fernando Lozano	Nicolas Vayatis
Ran El-Yaniv	Gabor Lugosi	Jean-Philippe Vert
Andre Ellisseef	Ulrike von Luxburg	Volodya Vovk
Eyal Even-Dar	Olvi Mangasarian	Grace Wahba
Theodoros Evgeniou	Shie Mannor	Osamu Watanabe
Amos Fiat	David McAllester	Rolf Wiehagen
Karim Filali	Ron Meir	Tong Zhang
Peter Flach	Shahar Mendelson	Sandra Zilles

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June 2003   Bernhard Schölkopf (Max Planck Instititute Tübingen)
                    Manfred K. Warmuth (University of California at Santa Cruz)
                                                          Program Chairs

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