Call for Papers: ALT 2009

The 20th International Conference on Algorithmic Learning Theory

University of Porto, Portugal, October 3 - 5, 2009

The 20th International Conference on Algorithmic Learning Theory (ALT 2009) will be held at the University of Porto, Portugal, during October 3 - 5, 2009. The conference is on the theoretical foundations of machine learning. ALT 2009 will be co-located with the 12th International Conference on Discovery Science (DS 2009).

Topics of Interest: We invite submissions making contributions to the theory of learning including the following:

• Comparison of the strength of learning models and the design and evaluation of novel algorithms for learning problems in established learning-theoretic settings such as inductive inference, statistical learning theory, on-line learning, query models, unsupervised, semi-supervised and active learning.

• Analysis of the theoretical properties of existing algorithms, where families of algorithms could include: boosting, kernel-based methods, SVM, Bayesian networks, methods for reinforcement learning or learning in repeated games, graph- and/or manifold-based methods, methods for latent-variable estimation and/or clustering, methods based on Dirichlet processes, MDL, decision tree methods, information-based methods. Analyses could include generalization, convergence or computational efficiency.

• Definition and analysis of new learning models. Models might identify and formalize classes of learning problems inadequately addressed by existing theory or capture salient properties of important applications.

Invited Talks. There will be invited talks by Sanjoy Dasgupta, Hector Geffner, Jiawei Han, Yishay Mansour, and Fernando C. N. Pereira.

Submissions. Papers should be submitted electronically. Details are given at the ALT 2009 web-page.

Important Dates.

Submission deadline: May 10, 2009
Notification of acceptance: June 18, 2009
Camera ready due: July 10, 2009

Format. Submissions should be no longer than 15 pages in the standard format for Springer's Lecture Notes in Artificial Intelligence series. The 15 page limit includes title, abstract, acknowledgments, references, illustrations and any other parts of the paper. Appendices bypassing the page limit are not allowed.

Policy. Each submitted paper will be reviewed by the members of the program committee and be judged on clarity, significance, and originality. *Joint submissions to other conferences with published proceedings are not allowed. Papers that have appeared in journals or other conferences are not appropriate for ALT 2007.*

Proceedings will be published as a volume in the Lecture Notes Series in Artificial Intelligence, Springer, and will be available at the conference.

Selected papers of ALT 2009 will be invited to a special issue of the journal *Theoretical Computer Science*.

E.M. Gold Award. One scholarship of 555€ will be awarded to a student author (please *mark student submissions* on the title page) of an excellent paper.

Conference Chair:

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Program Committee Chairs:

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Conference Homepage:

http://www-alg.ist.hokudai.ac.jp/~thomas/ALT09/alt09.jhtml