

# Preface

This volume contains all the papers presented at the Eleventh International Conference on Algorithmic Learning Theory (ALT 2000) held at Coogee Holiday Inn, Sydney, Australia, 11–13 December 2000. The conference was sponsored by the School of Computer Science and Engineering, University of New South Wales, and supported by the IFIP Working Group 1.4 on Computational Learning Theory and the Computer Science Association (CSA) of Australia.

In response to the call for papers 39 submissions were received on all aspects of algorithmic learning theory. Out of these 22 papers were accepted for presentation by the program committee. In addition, there were three invited talks by William Cohen (Whizbang Labs), Tom Dietterich (Oregon State University), and Osamu Watanabe (Tokyo Institute of Technology).

This year's conference is the last in the millenium and eleventh overall in the ALT series. The first ALT workshop was held in Tokyo in 1990. It was merged with the workshop on Analogical and Inductive Inference in 1994. The conference focuses on all areas related to algorithmic learning theory, including (but not limited to) the design and analysis of learning algorithms, the theory of machine learning, computational logic of/for machine discovery, inductive inference, learning via queries, new learning models, scientific discovery, learning by analogy, artificial and biological neural networks, pattern recognition, statistical learning, Bayesian/MDL estimation, inductive logic programming, data mining and knowledge discovery, and application of learning to biological sequence analysis. In the current conference there were papers from a variety of the above areas, reflecting both the theoretical as well as practical aspects of learning. The conference was collocated with Pacific Knowledge Acquisition Workshop and Australian Machine Learning Workshop, thus providing interesting interaction between the above communities.

The E. M. Gold Award is presented to the most outstanding paper by a student author, selected by the program committee of the conference. This year's award was given to Gunter Grieser for the paper "Learning of recursive concepts with anomalies."

We would like to thank the program committee members, Naoki Abe (NEC, Japan), Mike Bain (Univ. of New South Wales, Australia), Peter Bartlett (Australian National Univ., Australia), Shai Ben David (Technion, Israel), Rusins Freivalds (Univ. of Latvia, Latvia), Nitin Indurkha (Nanyang Tech Univ., Singapore), Roni Khardon (Tufts University, USA), Eric Martin (Univ. of New South Wales, Australia), Yasu Sakakibara (Tokyo Denki Univ., Japan), Takeshi Shinohara (Kyushu Inst. of Tech, Japan), Frank Stephan (Univ. of Heidelberg, Germany), Osamu Watanabe (Titech, Japan), and Akihiro Yamamoto (Hokkaido Univ., Japan) and the subreferees (listed separately) for spending their valuable time reviewing and evaluating the papers.

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December 2000

Hiroki Arimura  
Sanjay Jain  
Arun Sharma

## Referees

Nader Bshouty  
Nadav Eiron  
Toshiaki Ejima  
Koichi Hirata  
Hiroki Ishizaka

Satoshi Kobayashi  
Takeshi Koshiba  
W. S. Lee  
Seishi Okamoto  
Wolfgang Merkle

Tetsuhiro Miyahara  
Noriko Sugimoto  
Jun Takeuti  
Takashi Yokomori

## Sponsoring Institutions

School of Computer Science and Engineering, The University of New South Wales

## Supporting Organizations

IFIP Working Group 1.4 on Computational Learning Theory  
Computer Science Association (CSA)