

# Foreword

It gives us great pleasure to introduce this collection of papers to be presented at the 2006 International Conference on Data Mining, DMIN'06 ([www.dmin-2006.com](http://www.dmin-2006.com)), June 26 through 29, 2006, at the Monte Carlo Resort, Las Vegas, Nevada, USA.

Data Mining is receiving an ever increasing attention in academia and practice, across various disciplines and application domains. To reflect its multi- and interdisciplinary nature, few conferences are better suited to facilitate communication and the exchange of ideas amongst researchers in different fields than the DMIN conferences held annually within WORLDCOMP. WORLDCOMP'06 is one of the largest annual gatherings of researchers in computer science, computer engineering and applied computing. It assembles a spectrum of 28 affiliated research conferences, workshops, and symposiums into a coordinated research meeting held simultaneously in one location. We hope that DMIN'06 will provide you with a forum to present your research in a professional environment and exchange ideas within a number of research areas that interact.

DMIN conferences seek to acknowledge and facilitate excellence in research and applications in the area of data mining. DMIN conferences have been ranked within the top 10 conferences in Data Mining worldwide and within the top 30% (no. 78 of 328 conferences) in the domain of "Databases/Knowledge & Data Management/Data Security/Web/Mining" through an independent review at Computer Science Conference Rating ([www.cs-conference-ranking.org](http://www.cs-conference-ranking.org)). In addition, DMIN conferences put a particular emphasis on supporting students and starting researchers from lesser developed countries, to allow a truly international networking and understanding. DMIN'06 has supported the research of over 15 students and researchers from lesser developed countries by funding registration, accommodation and living expenses. As a consequence, 41% of all accepted submissions stem from original research conducted by students and starting researchers. 71% of all submissions came from outside the USA, with contributions from 27 different countries. We consider the resulting diversity in attendees and the mixture of established and starting researchers a particular advantage of an engaging conference format. Considering the satisfactory reviews and our increasing efforts towards quality of the review process, conference sessions and a dedicated social programme for DMIN'06 we hope that you can look forward to participating & attending a leading international conference!

DMIN'06 attracted a large number of submissions of theoretical research papers as well as industrial reports and case studies on applications. The submissions reflect an increase of 283% towards last year! The programme committee would like to thank all those who submitted papers for review. To reflect upon feedback from previous years we sought to further extend the quality and rigor of the review process and the constructive feedback given within the reviews. To ensure a fair, objective and transparent review process all review criteria were published on the website. Papers were objectively evaluated for relevance to DMIN, originality, significance, information content, clarity, and soundness on an international level. Each aspect was objectively evaluated, with alternative aspects finding consideration for application papers. Each paper was refereed by at least two researchers in the topical area, taken the reviewer's expertise and confidence into consideration. The camera-ready papers were reviewed by one person. The blind review process was objective and highly competitive, rejecting several papers from well established members of the programme committee. The overall acceptance rate for DMIN'06 together with its affiliated events BIOCAMP'06, PDPTA'06, IPCV'06, and FCS'06 is 34%.

We are very grateful to the many colleagues who helped in organising the conference. In particular, we would like to thank the members of the DMIN'06 programme committee whose support was essential to further increasing the quality of the DMIN conferences. The DMIN'06 programme committee members are:

Ajith Abraham, Chung-Ang University, Seoul, Republic of Korea  
Vasilis Aggelis, PIRAEUS Bank S.A., Athens, Greece  
Palmen Angelov, Lancaster University, Lancaster, UK  
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In addition, we would like to express our gratitude to our publicity co-chairs Innar Liiv, Tallinn University of Technology, Tallinn, Estonia, and Ashu Solo, Maverick Technologies America, Wilmington DE, USA, for circulating information on the conference, as well as the conference event organiser and coordinator Freya Staack, Business Intelligence Laboratory, Hamburg, Germany.

The DMIN'06 conference organisers are particularly thankful to a number of co-sponsors, without whom the conference would not have been possible. In particular, we would like to thank our academic co-sponsors, the Massachusetts Institute of Technology's (MIT) Media Lab ([www.media.mit.edu](http://www.media.mit.edu)) and the Texas Advanced Computer Center (TACC) of University of Texas at Austin ([www.tacc.utexas.edu/](http://www.tacc.utexas.edu/)) Furthermore, we appreciate the support from our media co-sponsors HPC wire ([www.hpcwire.com](http://www.hpcwire.com)), GRID today ([www.gridtoday.com](http://www.gridtoday.com)), H2CM Hodges' Health ([www.p-jones.demon.co.uk](http://www.p-jones.demon.co.uk)) and Charter Cable Internet Access ([www.ezisp.info/high-speed/cable-internet.html](http://www.ezisp.info/high-speed/cable-internet.html)) as well as the general co-sponsors of One Laptop Per Child Association (OLPC; [www.laptop.org](http://www.laptop.org)) and the International Technology Institute ([www.itiworld.org](http://www.itiworld.org)). In addition to the above, several publishers of computer science and computer engineering books and journals, chapters and/or task forces of computer science associations/organisations from 12 countries, and developers of high-performance machines and systems have provided significant help in organising the conferences. We are also thankful for the general co-sponsors and organisers including university faculty members and their staff from the Centre for Forecasting and Predictive Intelligence at the department of Management Science of Lancaster University Management School, UK ([www.lums.lancs.ac.uk/forecasting/](http://www.lums.lancs.ac.uk/forecasting/)), the Institute of Information Systems at the University of Hamburg, Germany ([www.uni-hamburg.de/IWI](http://www.uni-hamburg.de/IWI)), the World Academy of Science ([www.world-academy-of-science.org](http://www.world-academy-of-science.org)), CSREA Computer Science Research, Education, and Applications Press, and the Business Intelligence Laboratory, B I<sup>3</sup>S lab, Hamburg, Germany ([www.bis-lab.com](http://www.bis-lab.com)) hosted by the RETURN Software, Hamburg, Germany.

Most importantly, we would like to express our gratitude and respect towards Prof. Hamid Arabnia, General Chair of all WORLDCOMP conferences, for his excellent and tireless support, organisation and coordination of all affiliated events. Without his efforts, none of these events would be possible!

Thank you all for your contribution to DMIN'06! We hope that you will experience a stimulating conference with many opportunities for future contacts, research and applications.

Sven F. Crone  
DMIN'06 General Conference Chair

Stefan Lessmann, Robert Stahlbock  
DMIN'06 Conference Programme Chairs