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# Advanced Data Mining and Applications

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# Preface

With the ever-growing power to generate, transmit and collect huge amounts of data, information overload is now an imminent problem to mankind. The overwhelming demand for information processing is not just about a better understanding of data, but also a better usage of data in a timely fashion. Data mining, or knowledge discovery from databases, is proposed to gain insight into aspects of data and to help people make informed, sensible, and better decisions. At present, growing attention has been paid to the study, development and application of data mining. As a result there is an urgent need for sophisticated techniques and tools that can handle new fields of data mining, e.g., spatial data mining, biomedical data mining, and mining on high-speed and time-variant data streams. The knowledge of data mining should also be expanded to new applications.

The 1st International Conference on Advanced Data Mining and Applications (ADMA 2005) aimed to bring together the experts on data mining throughout the world. It provided a leading international forum for the dissemination of original research results in advanced data mining techniques, applications, algorithms, software and systems, and different applied disciplines. The conference attracted 539 online submissions and 63 mailing submissions from 25 different countries and areas. All full papers were peer reviewed by at least three members of the Program Committee composed of international experts in data mining fields. A total number of 100 papers were accepted for the conference. Amongst them 25 papers were selected as regular papers and 75 papers were selected as short papers, yielding a combined acceptance rate of 17%.

The ADMA 2005 program highlights were four keynote speeches from outstanding researchers in advanced data mining and application areas: David Olson, Deyi Li, Chenqi Zhang, and Osmar Zaiane. The conference also invited researchers from two Australian universities to report on their latest research findings.

May 2005

Xue Li,  
Shuliang Wang,  
Zhaoyang Dong

# Conference Committee

ADMA 2005 was organized by the International School of Software, Wuhan University, China and the School of Information Technology and Electrical Engineering, the University of Queensland, Australia; sponsored by the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, China and the WISE (Web Information Systems Engineering, <http://www.i-wise.org/>) Society; and technically co-sponsored by the IEEE Queensland Section.

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