

Preface

This volume contains the papers selected for presentation at the Third Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-99) held in the Xiangshan Hotel, Beijing, China, April 26-28, 1999. The conference was sponsored by Tsinghua University, National Science Foundation of China, Chinese Computer Federation, Toshiba Corporation, and NEC Software Chugoku, Ltd.

PAKDD-99 provided an international forum for the sharing of original research results and practical development experiences among researchers and application developers from different KDD-related areas such as machine learning, databases, statistics, knowledge acquisition, data visualization, knowledge-based systems, soft computing, and high performance computing. It followed the success of PAKDD-97 held in Singapore in 1997 and PAKDD-98 held in Australia in 1998 by bringing together participants from universities, industry, and government.

PAKDD-99 encouraged both new theory/methodologies and real world applications, and covered broad and diverse topics in data mining and knowledge discovery. The technical sessions included: Association Rules Mining; Feature Selection and Generation; Mining in Semi, Un-structured Data; Interestingness, Surprisingness, and Exceptions; Rough Sets, Fuzzy Logic, and Neural Networks; Induction, Classification, and Clustering; Causal Model and Graph-Based Methods; Visualization; Agent-Based, and Distributed Data Mining; Advanced Topics and New Methodologies.

Of the 158 submissions, we accepted 29 regular papers and 37 short papers for presentation at the conference and for publication in this volume. In addition, over 20 papers were accepted for poster presentation.

The PAKDD-99 program was further supplemented by two invited speakers: Won Kim and Hiroshi Motoda, a special session on Emerging KDD Technology (Speakers: Zdzislaw Pawlak, Philip Yu, T.Y. Lin, Hiroshi Tsukimoto), and a panel session on Knowledge Management in Data Mining (Chair: Xindong Wu; Panelists: Rao Kotagiri, Zhongzhi Shi, Jan M. Żytkow).

Two tutorials: Automated Discovery - Combining AI, Statistics and Theory of Knowledge by Jan M. Żytkow, Quality Data and Effective Mining by Hongjun Lu, and a workshop on Knowledge Discovery from Advanced Databases organized by Mohamed Quafafou and Philip Yu, were also offered to all conference participants on April 26.

A conference such as this can only succeed as a team effort. We would like to acknowledge the contribution of the program committee members and thank the reviewers for their reviewing efforts, the PAKDD steering committee members for their invaluable input and advice, and the conference chairs: Bo Zhang and Setsuo Ohsuga whose involvement and support have added greatly to the quality of the conference. Our sincere gratitude goes to all of the authors who submitted papers. We are grateful to our sponsors for their generous support. Special thanks are due to Alfred Hofmann of Springer-Verlag for his help and cooperation.

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