

David Cheung  
Graham J. Williams  
Qing Li (Eds.)

# Advances in Knowledge Discovery and Data Mining

5th Pacific-Asia Conference, PAKDD 2001  
Hong Kong, China, April 2001  
Proceedings



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# Advances in Knowledge Discovery and Data Mining

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## Preface

PAKDD 2001, Hong Kong, 16–18 April, was organized by the E-Business Technology Institute of The University of Hong Kong in cooperation with ACM Hong Kong, IEEE Hong Kong Chapter, and The Hong Kong Web Society. It was the Fifth Pacific-Asia Conference on Knowledge Discovery and Data Mining and the successor of earlier PAKDD conferences held in Singapore (1997), Melbourne, Australia (1998), Beijing, China (1999), and Kyoto, Japan (2000).

PAKDD 2001 brought together participants from universities, industry, and government to present, discuss, and address both current issues and novel approaches in the practise, deployment, theory, and methodology of Knowledge Discovery and Data Mining. The conference provides an international forum for the sharing of original research results and practical development experiences among researchers and application developers from the many KDD related areas including machine learning, databases, statistics, internet, e-commerce, knowledge acquisition, data visualization, knowledge-based systems, soft computing, and high performance computing.

The PAKDD 2001 conference included technical sessions organized around important subtopics such as: Web Mining; Text Mining; Applications and Tools; Interestingness; Feature Selection; Sequence Mining; Spatial and Temporal Mining; Concept Hierarchies; Association Mining; Classification and Rule Induction; Clustering; and Advanced Topics and New Methods.

Following careful review of the 152 submissions by members of the international program committee 38 regular papers and 22 short papers were selected for presentation at the conference and for publication in this volume.

The conference program also included invited keynote presentations from three international researchers and developers in data mining: H. V. Jagadish of the University of Michigan, Ronny Kohavi of Blue Martini, and Hongjun Lu of the University of Science and Technology, Hong Kong. Abstracts of their presentations are included in this volume.

The conference presented six tutorials from experts in their respective disciplines: An Introduction to MARS (Dan Steinberg); Static and Dynamic Data Mining Using Advanced Machine Learning Methods (Ryszard S. Michalski); Sequential Pattern Mining: From Shopping History Analysis to Weblog Mining and DNA Mining (Jiawei Han and Jian Pei); Recent Advances in Data Mining Algorithms for Large Databases (Rajeev Rastogi and Kyuseok Shim); Web Mining for E-Commerce (Jaideep Srivastava); and From Evolving Single Neural Networks to Evolving Ensembles (Xin Yao).

Associated workshops included: Spatial and Temporal Data; Statistical Techniques in Data Mining; and Data Mining and Electronic Business.

A conference such as this can only succeed as a team effort. We would like to thank the program committee members and reviewers for their efforts and the PAKDD steering committee members for their invaluable input and advice. Our sincere gratitude goes to all of the authors who submitted papers. We are grateful to our sponsors for their generous support. Special thanks go to Ms Winnie Yau, E-Business Technology Institute, The University of Hong Kong, for her considerable efforts, seamlessly keeping everything running smoothly and coordinating the many streams of the conference organization.

On behalf of the organizing and program committees of PAKDD 2001 we trust you found the conference a fruitful experience and hope you had an enjoyable stay in Hong Kong.

February 2001

Chung-Jun Tan, Jiawei Han  
David Cheung, Graham J. Williams, Qing Li

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# Table of Contents

## Keynote Presentations

- Incompleteness in Data Mining ..... 1  
*Hosagrahar Visvesvaraya Jagadish*

- Mining E-Commerce Data: The Good, the Bad, and the Ugly ..... 2  
*Ronny Kohavi*

- Seamless Integration of Data Mining with DBMS and Applications ..... 3  
*Hongjun Lu*

## Web Mining

- Applying Pattern Mining to Web Information Extraction ..... 4  
*Chia-Hui Chang, Shao-Chen Lui, Yen-Chin Wu*

- Empirical Study of Recommender Systems Using Linear Classifiers ..... 16  
*Vijay S. Iyengar, Tong Zhang*

- iJADE eMiner—A Web-Based Mining Agent Based on Intelligent Java Agent Development Environment (iJADE) on Internet Shopping ..... 28  
*Raymond S.T. Lee, James N.K. Liu*

- A Characterized Rating Recommend System ..... 41  
*Yao-Tsung Lin, Shian-Shyong Tseng*

- Discovery of Frequent Tree Structured Patterns in Semistructured Web Documents ..... 47  
*Tetsuhiro Miyahara, Takayoshi Shoudai, Tomoyuki Uchida,  
Kenichi Takahashi, Hiroaki Ueda*

## Text Mining

- Text Categorization Using Weight Adjusted  $k$ -Nearest Neighbor Classification ..... 53  
*Eui-Hong Han, George Karypis, Vipin Kumar*

- Predictive Self-Organizing Networks for Text Categorization ..... 66  
*Ah-Hwee Tan*

- Meta-learning Models for Automatic Textual Document Categorization ..... 78  
*Kwok-Yin Lai, Wai Lam*

- Efficient Algorithms for Concept Space Construction ..... 90  
*Chi Yuen Ng, Joseph Lee, Felix Cheung, Ben Kao, David Cheung*

Topic Detection, Tracking, and Trend Analysis Using Self-Organizing Neural Networks .....	102
<i>Kanagasabi Rajaraman, Ah-Hwee Tan</i>	

Automatic Hypertext Construction through a Text Mining Approach by Self-Organizing Maps .....	108
<i>Hsin-Chang Yang, Chung-Hong Lee</i>	

## Applications and Tools

Semantic Expectation-Based Causation Knowledge Extraction: A Study on Hong Kong Stock Movement Analysis.....	114
<i>Boon-Toh Low, Ki Chan, Lei-Lei Choi, Man-Yee Chin, Sin-Ling Lay</i>	

A Toolbox Approach to Flexible and Efficient Data Mining.....	124
<i>Ole M. Nielsen, Peter Christen, Markus Hegland, Tatiana Semenova, Timothy Hancock</i>	

Determining Progression in Glaucoma Using Visual Fields .....	136
<i>Andrew Turpin, Eibe Frank, Mark Hall, Ian H. Witten, Chris A. Johnson</i>	

Seabreeze Prediction Using Bayesian Networks.....	148
<i>Russell J. Kennett, Kevin B. Korb, Ann E. Nicholson</i>	

Semi-supervised Learning in Medical Image Database.....	154
<i>Chun Hung Li, Pong Chi Yuen</i>	

On Application of Rough Data Mining Methods to Automatic Construction of Student Models .....	161
<i>Feng-Hsu Wang, Shiou-Wen Hung</i>	

## Concept Hierarchies

Concept Approximation in Concept Lattice .....	167
<i>Keyun Hu, Yuefei Sui, Yuchang Lu, Ju Wang, Chunyi Shi</i>	

Generating Concept Hierarchies/Networks: Mining Additional Semantics in Relational Data .....	174
<i>T.Y. Lin</i>	

Representing Large Concept Hierarchies Using Lattice Data Structure ....	186
<i>Yanee Kachai, Kitsana Waiyamai</i>	

## Feature Selection

Feature Selection for Temporal Health Records .....	198
<i>Rohan A. Baxter, Graham J. Williams, Hongxing He</i>	

Boosting the Performance of Nearest Neighbour Methods with Feature Selection .....	210
Shlomo Geva	
Feature Selection for Meta-learning .....	222
Alexandros Kalousis, Melanie Hilario	
<b>Interestingness</b>	
Efficient Mining of Niches and Set Routines .....	234
Guozhu Dong, Kaustubh Deshpande	
Evaluation of Interestingness Measures for Ranking Discovered Knowledge .....	247
Robert J. Hilderman, Howard J. Hamilton	
Peculiarity Oriented Mining and Its Application for Knowledge Discovery in Amino-Acid Data .....	260
Ning Zhong, Muneaki Ohshima, Setsuo Ohsuga	
<b>Sequence Mining</b>	
Mining Sequence Patterns from Wind Tunnel Experimental Data for Flight Control .....	270
Zhenyu Liu, Wesley W. Chu, Adam Huang, Chris Folk, Chih-Ming Ho	
Scalable Hierarchical Clustering Method for Sequences of Categorical Values .....	282
Tadeusz Morzy, Marek Wojciechowski, Maciej Zakerzewicz	
FFS—An I/O-Efficient Algorithm for Mining Frequent Sequences .....	294
Minghua Zhang, Ben Kao, Chi-Lap Yip, David Cheung	
Sequential Index Structure for Content-Based Retrieval .....	306
Maciej Zakerzewicz	
<b>Spatial and Temporal Mining</b>	
The $S^2$ -Tree: An Index Structure for Subsequence Matching of Spatial Objects .....	312
Haixun Wang, Chang-Shin Perng	
Temporal Data Mining Using Hidden Markov-Local Polynomial Models ..	324
Weiqiang Lin, Mehmet A. Orgun, Graham J. Williams	
Patterns Discovery Based on Time-Series Decomposition .....	336
Jeffrey Xu Yu, Michael K. Ng, Joshua Zhexue Huang	