

# Table of Contents

## Multimedia Databases & High Dimensional Indexing (Session 1A)

Spatial-Match Iconic Image Retrieval with Ranking in Multimedia Databases .....	3
<i>Jae-Woo Chang and Yeon-Jung Kim (Chonbuk National University, Korea)</i>	
Similarity-Based Operators in Image Database Systems .....	14
<i>Solomon Atnafu, Lionel Brunie (LISI, INSA de Lyon, France), and Harald Kosch (University Klagenfurt, Austria)</i>	
An Efficient High-Dimensional Index Structure Using Cell Signatures for Similarity Search .....	26
<i>Jae-Woo Chang (Chonbuk National University, Korea) and Kwang-Taek Song (WOORIN R&amp;D Laboratory, Korea)</i>	
Using Object-Relational Database Systems and XML in the Context of an Wireless-Oriented Multimedia Information System .....	34
<i>Christoph Dittberner, Thomas Courvoisier, and Guntram Flach (Computer Graphics Center Rostock, Germany)</i>	

## Information Retrieval & Text Indexing (Session 1B)

Utilizing the Correlation between Query Keywords for Information Retrieval .....	49
<i>Tetsuya Yoshida, Daiki Shinkai, and Shogo Nishida (Osaka University, Japan)</i>	
Adjacency Matrix Based Full-Text Indexing Models .....	60
<i>Shuigeng Zhou, Jihong Guan (Wuhan University, China), Yunfa Hu, Jiangtao Hu, and Aoying Zhou (Fudan University, China)</i>	
Goal-Oriented Information Retrieval Using Feedback from Users .....	72
<i>Hiroyuki Toda, Toshifumi Enomoto, and Tetsuji Satoh (NTT Cyber Space Laboratories, Japan)</i>	
Classify Web Document by Key Phrase Understanding .....	80
<i>Changjie Tang, Tong Li, Changyu Liu, and Yin Ge (Sichuan University, China)</i>	

## Data Mining (Session 2A)

Deriving High Confidence Rules from Spatial Data Using Peano Count Trees .....	91
<i>William Perrizo, Qin Ding, Qiang Ding, and Amalendu Roy (North Dakota State University, USA)</i>	
A Distributed Hierarchical Clustering System for Web Mining .....	103
<i>Catherine W. Wen, Huan Liu (Arizona State University, USA), Wilson X. Wen (GoConnect, Australia), and Jeffery Zheng (CMST CSIRO, Australia)</i>	
ARMiner: A Data Mining Tool Based on Association Rules .....	114
<i>Haofeng Zhou, Beijun Ruan, Jianqiu Zhu, Yangyong Zhu, and Baile Shi (Fudan University, China)</i>	

An Integrated Classification Rule Management System for Data Mining ..	122
<i>Daling Wang , Yubin Bao, Xiao Ji, Guoren Wang, and Baoyan Song (Northeastern University, China)</i>	

## Semistructured Data Management (Session 2B)

Characterizing Web Document Change .....	133
<i>Lipyeow Lim (Duke University, USA), Min Wang, Sriram Padmanabhan (IBM T.J. Watson Research Center, USA), Jeffrey S. Vitter (Duke University, USA), and Ramesh Agarwal (IBM T.J. Watson Research Center, USA)</i>	
Identification of Syntactically Similar DTD Elements for Schema Matching .....	145
<i>Hong Su (Worcester Polytechnic Institute, USA), Sriram Padmanabhan, and Ming-Ling Lo (IBM T.J. Watson Research Center, USA)</i>	
An XML Based Electronic Medical Record Integration System .....	160
<i>Hongyan Li, Shiwei Tang, Dongqing Yang (Peking University, China), and Yi Yu (PeridotHealth Systems Pte Ltd, Singapore)</i>	
Enhancing XML Data Processing in Relational System with Indices .....	168
<i>Yuqi Liang, Aoying Zhou, Shihui Zheng, Long Zhang, and Wenyun Ji (Fudan University, China)</i>	

## Data Warehousing & Federated Databases (Session 3A)

A Multidimensional Data Model Supporting Complicated Aggregations .....	179
<i>Hongxing Tan (Henan University, Chinese Academy of Sciences, China), Wenwen Qi (Henan University, China), and Longxiang Zhou (Chinese Academy of Sciences, China)</i>	
Comparing String Similarity Measures for Reducing Inconsistency in Integrating Data from Different Sources .....	191
<i>Sergio Luján-Mora and Manuel Palomar (Universidad de Alicante, Spain)</i>	
Revisit on View Maintenance in Data Warehouses .....	203
<i>Weifa Liang (The Australian National University, Australia) and Jeffrey X. Yu (Chinese University of Hong Kong, China)</i>	
Experiences with a Hybrid Implementation of a Globally Distributed Federated Database System .....	212
<i>Xuebiao Xu, Andrew C. Jones, Nick Pittas, W. Alex Gray, Nick J. Fiddian (Cardiff University, UK), Richard J. White, John Robinson (University of Southampton, UK), Frank A. Bisby, and Sue M. Brandt (University of Reading, UK)</i>	

## Web Information Management & E-commerce (Session 3B)

Link Based Clustering of Web Search Results .....	225
<i>Yitong Wang and Masaru Kitsuregawa (The University of Tokyo, Japan)</i>	
Three-Tier Clustering: An Online Citation Clustering System .....	237
<i>Haifeng Jiang, Wenwu Lou, and Wei Wang (Hong Kong University of Science and Technology, China)</i>	
Introducing Navigation Graphs as a Technique for Improving WWW User Browsing .....	249
<i>Christos Bouras, Agisilaos Konidaris (Computer Technology Institute, Greece), Eleni Konidari (Child Development Centre, Greece), and Afrodite Sevasti (Computer Technology Institute, Greece)</i>	
The Evolution of the Contract Net Protocol .....	257
<i>Lai Xu and Hans Weigand (Tilburg University, The Netherlands)</i>	

## Temporal, Spatial & High Dimensional Information Management (Session 4A)

Semantic Compression of Temporal Data .....	267
<i>Claudio Bettini (Università di Milano, Italy)</i>	
Efficiently Computing Weighted Proximity Relationships in Spatial Databases .....	279
<i>Xuemin Lin, Xiaomei Zhou (University of New South Wales, Australia), Chengfei Liu (University of South Australia, Australia), and Xiaofang Zhou (University of Queensland, Australia)</i>	

Compressing the Index – A Simple and yet Efficient Approximation Approach to High-Dimensional Indexing .....	291
<i>Shuguang Wang, Cui Yu, and Beng Chin Ooi (National University of Singapore)</i>	

## Data Mining & Constraint Management (Session 4B)

Finding Dense Clusters in Hyperspace: An Approach Based on Row Shuffling .....	305
<i>Daniel Barbará and Xintao Wu (George Mason University, USA)</i>	

Modelling Classification Performance for Large Data Sets (An Empirical Study) .....	317
<i>Baohua Gu, Feifang Hu (National University of Singapore), and Huan Liu (Arizona State University, USA)</i>	

Mapping Referential Integrity Constraints from Relational Databases to XML .....	329
<i>Xiaochun Yang and Guoren Wang (Northeastern University, China)</i>	

## Data Integration & Filtering (Session 5A)

Attribute Value Extraction and Standardization in Data Integration .....	343
<i>Hongjun Lu (Hong Kong University of Science and Technology, China) and Zengping Tian (Fudan University, China)</i>	

Indexing Attributes and Reordering Profiles for XML Document Filtering and Information Delivery .....	355
<i>Wang Lian, David W. Cheung, and S.M. Yiu (The University of Hong Kong, China)</i>	

An Approach for Data Filtering Based on Rough Set Theory .....	367
<i>Xuri Yin, Zhihua Zhou, Ning Li, and Shifu Chen (Nanjing University, China)</i>	
<b>Workflow &amp; Adaptive Systems (Session 5B)</b>	
Web-Based Workflow Evolution in ADOME-WFMS .....	377
<i>Dickson K.W. Chiu (Hong Kong University of Science and Technology, China), Qing Li (City University of Hong Kong, China), and Kamalakar Karlapalem (IIT, India)</i>	
Meta-data Objects as the Basis for System Evolution .....	390
<i>Florida Estrella (UWE, UK), Zsolt Kovacs, Jean-Marie Le Goff (CERN, Switzerland), Richard McClatchey, and Norbert Toth (UWE, UK)</i>	
Adaptive Web Meta-search Enhanced by Constraint-Based Query Constructing and Mapping .....	400
<i>Lieming Huang, Ulrich Thiel, Matthias Hemmje, and Erich J. Neuhold (GMD-IPSI, Germany)</i>	
A Mixed Data Dissemination Strategy for Mobile Computing Systems ...	408
<i>Guohong Cao, Yiqiong Wu (The Pennsylvania State University, USA), and Bo Li (Xi'an Jiaotong University, China)</i>	
<b>Author Index .....</b>	417