

Table of Contents

Databases and Data Warehouses

Preserving Aggregation in an Object-Relational DBMS	1
<i>Johanna Wenny Rahayu, David Taniar</i>	
Database Compression Using an Offline Dictionary Method	11
<i>Abu Sayed Md. Latiful Hoque, Douglas McGregor, John Wilson</i>	
Representation of Temporal Unawareness	21
<i>Panagiotis Chountas, Ilias Petrounias, Krassimir Atanassov, Vassilis Kodigoianis, Elia El-Darzi</i>	
Scalable and Dynamic Grouping of Continual Queries	31
<i>Sharifullah Khan, Peter L. Mott</i>	
Uncertainty in Spatiotemporal Databases	43
<i>Erlend Tøssebro, Mads Nygård</i>	
Integrity Constraint Enforcement by Means of Trigger Templates.....	54
<i>Eladio Domínguez, Jorge Lloret, María Antonia Zapata</i>	
Current, Legacy, and Invalid Tuples in Conditionally Evolving Databases.....	65
<i>Ole Guttorm Jensen, Michael Böhlen</i>	
Magic Sets Method with Fuzzy Logic	83
<i>Karel Ježek, Martin Zíma</i>	

Information Retrieval

Information Retrieval Effectiveness of Turkish Search Engines	93
<i>Yüktan Bitirim, Yaşar Tonta, Hayri Sever</i>	
Comparing Linear Discriminant Analysis and Support Vector Machines ...	104
<i>Ibrahim Gokcen, Jing Peng</i>	
Cross-Language Information Retrieval Using Multiple Resources and Combinations for Query Expansion.....	114
<i>Fatiha Sadat, Masatoshi Yoshikawa, Shunsuke Uemura</i>	
Extracting Shape Features in JPEG-2000 Compressed Images	123
<i>Jianmin Jiang, Baofeng Guo, Pengjie Li</i>	

Comparison of Normalization Techniques for Metasearch	133
<i>Hayri Sever, Mehmet R. Tolun</i>	
On the Cryptographic Patterns and Frequencies in Turkish Language	144
<i>Mehmet Emin Dalkılıç, Gökhan Dalkılıç</i>	
Automatic Stemming for Indexing of an Agglutinative Language	154
<i>Sehyeong Cho, Seung-Soo Han</i>	
Pattern Acquisition for Chinese Named Entity Recognition: A Supervised Learning Approach	166
<i>Xiaoshan Fang, Huanye Sheng</i>	

Information Systems

The Information System for Creating and Maintaining the Electronic Archive of Documents	176
<i>Alexander Marchuk, Andrey Nemov, Konstantin Fedorov, Sergey Antyoufeev</i>	
KiMPA: A Kinematics-Based Method for Polygon Approximation	186
<i>Ediz Şaykol, Gürcan Güleşir, Uğur Gündükbay, Özgür Ulusoy</i>	
The Implementation of a Robotic Replanning Framework	195
<i>Şule Yıldırım, Turhan Tunalı</i>	
A 300 MB Turkish Corpus and Word Analysis	205
<i>Gökhan Dalkılıç, Yalçın Çebi</i>	
Adaptation of a Neighbor Selection Markov Chain for Prefetching Tiled Web GIS Data	213
<i>Dong Ho Lee, Jung Sup Kim, Soo Duk Kim, Ki Chang Kim, Yoo-Sung Kim, Jaehyun Park</i>	
Web Based Automation Software for Calculating Production Costs in Apparel Industry	223
<i>Ender Yazgan Bulgun, Alp Kut, Güngör Baser, Mustafa Kasap</i>	

Multi-agent Technologies and Systems

Knowledge Representation in the Agent-Based Travel Support System	232
<i>Marcin Paprzycki, Austin Gilbert, Minor Gordon</i>	
Intelligent Agents in Virtual Worlds	242
<i>Philippe Codognet</i>	
Characterizing Web Service Substitutivity with Combined Deductive and Inductive Engines	244
<i>Marcelo A.T. Aragão, Alvaro A.A. Fernandes</i>	

Modular-Fuzzy Cooperation Algorithm for Multi-agent Systems	255
<i>İrfan Gültekin, Ahmet Arslan</i>	
Minimax Fuzzy Q-Learning in Cooperative Multi-agent Systems	264
<i>Alper Kilic, Ahmet Arslan</i>	
A Component-Based, Reconfigurable Mobile Agent System for Context-Aware Computing	273
<i>Hsin-Ta Chiao, Ming-Chun Cheng, Yue-Shan Chang, Shyan-Ming Yuan</i>	
A FIPA-Compliant Agent Framework with an Extra Layer for Ontology Dependent Reusable Behaviour	283
<i>Rıza Cenk Erdur, Oğuz Dikenelli</i>	

Evolutionary Algorithms

Vibrational Genetic Algorithm (Vga) for Solving Continuous Covering Location Problems	293
<i>Murat Ermiş, Füsun Ülengin, Abdurrahman Hacıoğlu</i>	
Minimal Addition-Subtraction Chains Using Genetic Algorithms	303
<i>Nadia Nedjah, Luiza de Macedo Mourelle</i>	
Preserving Diversity through Diploidy and Meiosis for Improved Genetic Algorithm Performance in Dynamic Environments	314
<i>A. Sima Etaner-Uyar, A. Emre Harmanci</i>	
Ant Systems: Another Alternative for Optimization Problems?	324
<i>Tatyana Yakhno, Emine Ekin</i>	

System Programming

Augmenting Object Persistency Paradigm for Faster Server Development	327
<i>Erdal Kemikli, Nadia Erdogan</i>	
Power Conscious Disk Scheduling for Multimedia Data Retrieval	336
<i>Jungwan Choi, Youjip Won, S.W. Nam</i>	
Task Scheduling with Conflicting Objectives	346
<i>Haluk Topcuoglu, Can Sevilmis</i>	
A Fast Access Scheme to Meet Delay Requirement for Wireless Access Network	356
<i>Sung-Ho Hwang, Ki-Jun Han</i>	

New Information Technologies in Education

Dokuz Eylul University - Distance Education Utilities Model 366
Alp Kut, Sen Çakir, Ender Yazgan Bulgun

Problem-Based Learning as an Example of Active Learning
and Student Engagement 375
Scott Grabinger, Joanna C. Dunlap

Use of PBL Method in Teaching IT to Students from a Faculty
of Education: A Case Study 385
Sevinç Gülseçen

Interval Matrix Vector Calculator – The iMVC 1.0 386
Ayşe Bulgak, Diliaver Eminov

Distributed and Parallel Data Processing

Efficient Code Deployment for Heterogeneous Distributed Data Sources ... 395
Deniz Demir, Haluk Topcuoglu, Ergun Kavukcu

Efficient Parallel Modular Exponentiation Algorithm 405
Nadia Nédjah, Luiza de Macedo Mourelle

Interprocedural Transformations for Extracting Maximum
Parallelism 415
Yu-Sug Chang, Hye-Jung Lee, Doo-Soon Park, Im-Yeong Lee

On Methods' Materialization in Object-Relational Data Warehouse 425
Bartosz Bebel, Zbyszko Królikowski, Robert Wrembel

Author Index 435

Advances in Information Systems

Second International Conference, ADVIS 2002, Izmir,

Turkey, October 23-25, 2002. Proceedings

Yakhno, T. (Ed.)

2002, XII, 436 p., Softcover

ISBN: 978-3-540-00009-9