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Preface

The book you are reading comprises the research articles as well as the abstracts of invited talks presented at DEXA 2013, the 24th International Conference on Database and Expert Systems Applications. The conference was held in Prague, the lovely Czech capital, where DEXA already took place in 1993 and 2003. The presented papers show that DEXA has successfully stayed true to a core of themes in the areas of databases, intelligent systems, and related applications, but also that DEXA promotes changing paradigms, new developments, and emerging trends. For the 2013 edition, we had called for novel results or qualified surveys in a wide range of topics, including:

- * Acquisition, Modeling, Management and Processing of Knowledge
- * Authenticity, Consistency, Integrity, Privacy, Quality, Security of Data
- * Availability
- * Constraint Modeling and Processing
- * Database Federation and Integration, Interoperability, Multi-Databases
- * Data and Information Networks
- * Data and Information Semantics
- * Data and Information Streams
- * Data Provenance
- * Data Structures and Data Management Algorithms
- * Database and Information System Architecture and Performance
- * Data Mining and Data Warehousing
- * Datalog 2.0
- * Decision Support Systems and Their Applications
- * Dependability, Reliability and Fault Tolerance
- * Digital Libraries
- * Distributed, Parallel, P2P, Grid, and Cloud Databases
- * Incomplete and Uncertain Data
- * Inconsistency Tolerance
- * Information Retrieval
- * Information and Database Systems and Their Applications
- * Metadata Management
- * Mobile, Pervasive and Ubiquitous Data
- * Modeling, Automation and Optimization of Processes
- * Multimedia Databases
- * NoSQL and NewSQL Databases
- * Object, Object-Relational, and Deductive Databases
- * Provenance of Data and Information
- * Replicated Databases
- * Semantic Web and Ontologies
- * Sensor Data Management

- * Statistical and Scientific Databases
- * Temporal, Spatial, and High-Dimensional Databases
- * User Interfaces to Databases and Information Systems
- * WWW and Databases, Web Services
- * Workflow Management and Databases
- * XML and Semi-structured Data

In response to this call, we received 174 submissions from all over the world, of which 43 are included in these proceedings as accepted full papers, and 33 as short papers. We are grateful to the many authors who submitted their work to DEXA. Decisions on acceptance or rejection were based on at least three reviews for each submission. Most of the reviews were detailed and provided constructive feedback to the authors. We owe our deepest thanks to all members of the Program Committee and to the external reviewers who invested their expertise, interest, and time in their reviews.

The program of DEXA 2013 was enriched by three exceptional invited keynote speeches, presented by distinguished colleagues:

- Trevor Bench-Capon: “Structuring E-Participation in Policy Making Through Argumentation”
- Tova Milo: “Making Collective Wisdom Wiser”
- Klaus-Dieter Schewe: “Horizontal and Vertical (Business Process) Model Integration”

In addition to the main conference track, DEXA 2013 also featured seven workshops that explored a wide spectrum of specialized topics of growing general importance. The organization of the workshops was chaired by Franck Morvan, A. Min Tjoa, and Roland R. Wagner, to whom we say “many thanks indeed” for their smooth and effective work.

Special thanks go to the host of DEXA 2013, the Prague University of Economics, where, under the admirable guidance of the DEXA 2013 General Chairs Josef Basl and A. Min Tjoa, an excellent working atmosphere was provided.

Last, but not at all least, we express our heartfelt gratitude to Gabriela Wagner. Her professional attention to detail, skillful management of the DEXA event as well as her preparation of the proceedings volumes are greatly appreciated.

August 2013

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Table of Contents – Part II

AI and Databases

Establishing Relevance of Characteristic Features for Authorship Attribution with ANN	1
<i>Urszula Stańczyk</i>	
Genetic Programming with Greedy Search for Web Service Composition	9
<i>Anqi Wang, Hui Ma, and Mengjie Zhang</i>	
Multivariate Prediction Based on the Gamma Classifier: A Data Mining Application to Petroleum Engineering	18
<i>Itzamá López-Yáñez, Leonid Sheremetov, and Oscar Camacho-Nieto</i>	
On Preference Order of DRSA Conditional Attributes for Computational Stylistics	26
<i>Urszula Stańczyk</i>	
Entity Matching Technique for Bibliographic Database	34
<i>Sumit Mishra, Samrat Mondal, and Sriparna Saha</i>	

Matching and Searching

On Efficient Map-Matching According to Intersections You Pass By	42
<i>Yaguang Li, Chengfei Liu, Kuien Liu, Jiajie Xu, Fengcheng He, and Zhiming Ding</i>	
A Linguistic Graph-Based Approach for Web News Sentence Searching	57
<i>Kim Schouten and Flavius Frasincar</i>	
Composite Patterns for Web API Search in Agile Web Application Development	65
<i>Devis Bianchini, Valeria De Antonellis, and Michele Melchiori</i>	
Evaluating the Interest of Revamping Past Search Results	73
<i>Claudio Gutiérrez-Soto and Gilles Hubert</i>	

Information Extraction

Main Content Extraction from Web Documents Using Text Block Context	81
<i>Myungwon Kim, Youngjin Kim, Wonmoon Song, and Ara Khil</i>	

A Similarity-Based Approach for Financial Time Series Analysis and Forecasting	94
<i>Marcos Vinicius Naves Bedo, Davi Pereira dos Santos, Daniel S. Kaster, and Caetano Traina Jr.</i>	

Inferring Knowledge from Concise Representations of Both Frequent and Rare Jaccard Itemsets	109
<i>Souad Bouasker and Sadok Ben Yahia</i>	

Queries, Streams, and Uncertainty

Comparison Queries for Uncertain Graphs	124
<i>Denis Dimitrov, Lisa Singh, and Janet Mann</i>	

Efficient Time Aggregation and Querying of Flashed Streams in Constrained Motes	141
<i>Pedro Furtado</i>	

Approximate OLAP Query Processing over Uncertain and Imprecise Multidimensional Data Streams	156
<i>Alfredo Cuzzocrea</i>	

Storage and Compression

Data Value Storage for Compressed Semi-structured Data	174
<i>Brian G. Tripney, Isla Ross, Francis A. Wilson, and John N. Wilson</i>	

Implementing Efficient Updates in Compressed Big Text Databases	189
<i>Stefan Böttcher, Alexander Büttmann, Rita Hartel, and Jonathan Schlußler</i>	

MXML Path-Based Storage and Ordered-Based Context Manipulation	203
<i>Nikolaos Foustieris, Manolis Gergatsoulis, and Yannis Stavrakas</i>	

Query Processing

Processing k Nearest Neighbor Queries for Location-Dependent Data in MANETs	213
<i>Yuka Komai, Yuya Sasaki, Takahiro Hara, and Shojiro Nishio</i>	

Continuous Predictive Line Queries under Road-Network Constraints . . .	228
<i>Lasanthi Heendaliya, Dan Lin, and Ali Hurson</i>	

Sensitivity Analysis of Answer Ordering from Probabilistic Databases	243
<i>Jianwen Chen, Yiping Li, and Ling Feng</i>	

Security

User Location Anonymization Method for Wide Distribution of Dummies	259
<i>Ryo Kato, Mayu Iwata, Takahiro Hara, Yuki Arase, Xing Xie, and Shojiro Nishio</i>	
An XML-Based Policy Model for Access Control in Web Applications.....	274
<i>Tania Basso, Nuno Antunes, Regina Moraes, and Marco Vieira</i>	
Behavioral Tendency Obfuscation Framework for Personalization Services.....	289
<i>Ryo Furukawa, Takao Takenouchi, and Takuya Mori</i>	

Distributed Data Processing

A Framework for Data Processing at the Edges of Networks	304
<i>Ichiro Satoh</i>	
STRING: Social-Transaction Routing over a Ring	319
<i>Idrissa Sarr, Hubert Naacke, and Abderrahmane Ould Mohamed Moctar</i>	
FOPA: A Final Object Pruning Algorithm to Efficiently Produce Skyline Points	334
<i>Ana Alvarado, Oriana Baldizan, Marlene Goncalves, and Maria-Esther Vidal</i>	

Metadata Modeling and Maintenance

UMAP: A Universal Layer for Schema Mapping Languages	349
<i>Florin Chertes and Ingo Feinerer</i>	
GCAPM: A Generic Context-Aware Model in Peer-to-Peer Environment	364
<i>Saloua Zammali, Khedija Arour, and Amel Bouzeghoub</i>	
Metadata Anchoring for Source Code: Robust Location Descriptor Definition, Building and Interpreting	372
<i>Karol Rástočný and Mária Bielíková</i>	

Pricing and Recommending

The Price Is Right: Models and Algorithms for Pricing Data	380
<i>Ruiming Tang, Huayu Wu, Zhifeng Bao, Stéphane Bressan, and Patrick Valduriez</i>	

What You Pay for Is What You Get	395
<i>Ruiming Tang, Dongxu Shao, Stéphane Bressan, and Patrick Valduriez</i>	
A File Recommendation Method Based on Task Workflow Patterns Using File-Access Logs	410
<i>Qiang Song, Takayuki Kawabata, Fumiaki Itoh, Yousuke Watanabe, and Haruo Yokota</i>	
Towards Addressing the Coverage Problem in Association Rule-Based Recommender Systems	418
<i>R. Uday Kiran and Masaru Kitsuregawa</i>	
Opinion-Based Collaborative Filtering to Solve Popularity Bias in Recommender Systems	426
<i>Xiangyu Zhao, Zhendong Niu, and Wei Chen</i>	
Security and Semantics	
Exploring Trust to Rank Reputation in Microblogging	434
<i>Leila Weitzel, José Palazzo Moreira de Oliveira, and Paulo Quaresma</i>	
Reverse Engineering of Database Security Policies	442
<i>Salvador Martínez, Valerio Cosentino, Jordi Cabot, and Frédéric Cuppens</i>	
Discovering Multi-stage Attacks Using Closed Multi-dimensional Sequential Pattern Mining	450
<i>Hanen Brahmi and Sadok Ben Yahia</i>	
CiDHouse: Contextual Semantic Data WareHouses	458
<i>Selma Khouri, Lama El Saraj, Ladjel Bellatreche, Bernard Espinasse, Nabila Berkani, Sophie Rodier, and Thérèse Libourel</i>	
Analysis of Clinical Documents to Enable Semantic Interoperability	466
<i>Barbara Franz, Andreas Schuler, and Emmanuel Helm</i>	
Author Index	475

Table of Contents – Part I

Keynote Talks

Horizontal and Vertical Business Process Model Integration (Abstract)	1
<i>Klaus-Dieter Schewe</i>	
Structuring E-Participation in Policy Making through Argumentation	4
<i>Trevor Bench-Capon</i>	
Making Collective Wisdom Wiser	7
<i>Tova Milo</i>	

Search Queries

Preferences Chain Guided Search and Ranking Refinement	9
<i>Yann Loyer, Isma Sadoun, and Karine Zeitouni</i>	
Efficient XML Keyword Search: From Graph Model to Tree Model	25
<i>Yong Zeng, Zhifeng Bao, Tok Wang Ling, and Guoliang Li</i>	
Permutation-Based Pruning for Approximate K-NN Search	40
<i>Hisham Mohamed and Stéphane Marchand-Maillet</i>	

Indexing

Dynamic Multi-probe LSH: An I/O Efficient Index Structure for Approximate Nearest Neighbor Search	48
<i>Shaoyi Yin, Mehdi Badr, and Dan Vodislav</i>	
Revisiting the Term Frequency in Concept-Based IR Models	63
<i>Karam Abdulahhad, Jean-Pierre Chevallet, and Catherine Berrut</i>	
BioDI: A New Approach to Improve Biomedical Documents Indexing ...	78
<i>Wiem Chebil, Lina Fatima Soualmia, and Stéfan Jacques Darmoni</i>	

Discovery of Semantics

Discovering Semantics from Data-Centric XML	88
<i>Luochen Li, Thuy Ngoc Le, Huayu Wu, Tok Wang Ling, and Stéphane Bressan</i>	

Finding Image Semantics from a Hierarchical Image Database Based on Adaptively Combined Visual Features	103
<i>Pritee Khanna, Shreelekha Pandey, and Haruo Yokota</i>	

Formalization and Discovery of Approximate Conditional Functional Dependencies	118
<i>Hiroki Nakayama, Ayako Hoshino, Chihiro Ito, and Kyota Kanno</i>	

Parallel Processing

Parallel Partitioning and Mining Gene Expression Data with Butterfly Network	129
<i>Tao Jiang, Zhanhuai Li, Qun Chen, Zhong Wang, Wei Pan, and Zhuo Wang</i>	

Parallel and Distributed Mining of Probabilistic Frequent Itemsets Using Multiple GPUs	145
<i>Yusuke Kozawa, Toshiyuki Amagasa, and Hiroyuki Kitagawa</i>	

Taming Elephants, or How to Embed Parallelism into PostgreSQL	153
<i>Constantin S. Pan and Mikhail L. Zymbler</i>	

XML and RDF

Effectively Delivering XML Information in Periodic Broadcast Environments	165
<i>Yongrui Qin, Quan Z. Sheng, Muntazir Mehdi, Hua Wang, and Dong Xie</i>	

GUN: An Efficient Execution Strategy for Querying the Web of Data ...	180
<i>Gabriela Montoya, Luis-Daniel Ibáñez, Hala Skaf-Molli, Pascal Molli, and Maria-Esther Vidal</i>	

Complex Matching of RDF Datatype Properties	195
<i>Bernardo Pereira Nunes, Alexander Mera, Marco Antônio Casanova, Besnik Fetahu, Luiz André P. Paes Leme, and Stefan Dietze</i>	

Enterprise Models

Coordination Issues in Artifact-Centric Business Process Models	209
<i>Giorgio Bruno</i>	

Exploring Data Locality for Clustered Enterprise Applications	224
<i>Stoyan Garbatov and João Cachopo</i>	

A Framework for Data-Driven Workflow Management: Modeling, Verification and Execution	239
<i>Nahla Haddar, Mohamed Tmar, and Faiez Gargouri</i>	

Query Evaluation and Optimization

Generic Top-k Query Processing with Breadth-First Strategies	254
<i>Mehdi Badr and Dan Vodislav</i>	
Evaluating Spatial Skyline Queries on Changing Data	270
<i>Fabiola Di Bartolo and Marlene Goncalves</i>	
SONIC: Scalable Multi-query OptimizatioN through Integrated Circuits	278
<i>Ahcène Boukorca, Ladjel Bellatreche, Sid-Ahmed Benali Senouci, and Zoé Faget</i>	

Semantic Web

XML Schema Transformations: The ELaX Approach	293
<i>Thomas Nösinger, Meike Klettke, and Andreas Heuer</i>	
StdTrip+K: Design Rationale in the RDB-to-RDF Process	303
<i>Rita Berardi, Karin Breitman, Marco Antônio Casanova, Giseli Rabello Lopes, and Adriana Pereira de Medeiros</i>	
Organizing Scientific Competitions on the Semantic Web	311
<i>Sayoko Shimoyama, Robert Sidney Cox III, David Gifford, and Tetsuro Toyoda</i>	
An Inductive Logic Programming-Based Approach for Ontology Population from the Web	319
<i>Rinaldo Lima, Bernard Espinasse, Hilário Oliveira, Rafael Ferreira, Luciano Cabral, Dimas Filho, Fred Freitas, and René Gadelha</i>	

Sampling

Incremental Algorithms for Sampling Dynamic Graphs	327
<i>Xuesong Lu, Tuan Quang Phan, and Stéphane Bressan</i>	
CoDS: A Representative Sampling Method for Relational Databases	342
<i>Teodora Sandra Buda, Thomas Cerqueus, John Murphy, and Morten Kristiansen</i>	
Publishing Trajectory with Differential Privacy: A Priori vs. A Posteriori Sampling Mechanisms	357
<i>Dongxu Shao, Kaifeng Jiang, Thomas Kister, Stéphane Bressan, and Kian-Lee Tan</i>	

Industrial Applications

Towards Automated Compliance Checking in the Construction Industry 366
 Thomas H. Beach, Tala Kasim, Haijiang Li, Nicholas Nisbet, and Yacine Rezgui

Quantifying Reviewer Credibility in Online Tourism 381
 Yuanyuan Wang, Stephen Chi Fai Chan, Grace Ngai, and Hong-Va Leong

Classifying Twitter Users Based on User Profile and Followers Distribution 396
 Liang Yan, Qiang Ma, and Masatoshi Yoshikawa

Communities

Fast Community Detection 404
 Yi Song and Stéphane Bressan

Force-Directed Layout Community Detection 419
 Yi Song and Stéphane Bressan

On the Composition of Digital Licenses in Collaborative Environments 428
 Marco Mesiti, Paolo Perlasca, and Stefano Valtolina

The *Hints from the Crowd* Project 443
 Paolo Fosci, Giuseppe Psaila, and Marcello Di Stefano

Database Technology: A World of Interaction 454
 Amira Kerkad, Ladjel Bellatreche, and Dominique Geniet

Author Index 463