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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

Hendrik Decker
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