Preface

Since 1990, DEXA has established itself as a premier forum in the intersection of data management, knowledge engineering, and artificial intelligence, providing a unique opportunity for the researchers, users, practitioners, and developers from multiple disciplines to present the state-of-the-art in these fields, exchange research ideas, share industry experiences, and explore future directions, which will help proliferate interdisciplinary discovery, drive innovation, and provide commercial opportunity. The 26th International Conference on Database and Expert Systems Applications took place in Valencia, Spain, during September 1–4, 2015. We are proud to present its program in these proceedings.

Each of the main days of the conference started out with a keynote by a distinguished scientist: Shahram Ghandeharizadeh from USC Database Laboratory of University of Southern California, USA; Juan Carlos Perez Cortes from Universidad Politecnica de Valencia (UPV), Spain; and Roland Traunmüller from Johannes Kepler Universität Linz, Austria. Accompanying the main conference were eight related conferences and workshops.

We received 125 submissions for the research track and industrial tracks, which is a testament to our community’s high regard for DEXA, and we thank all authors for submitting their innovative work to the conference.

The Program Committee (PC) comprised highly reputational scientists from all over the world. The paper selection process consisted of three distinct phases: the initial reviews by the PC members with each paper being evaluated by four reviewers on average, the early opinion exchanges, and the further discussion for fine-tuning of the review results. This year many submissions report competitive scientific and engineering breakthroughs; however, because of space limitations we had to reject some high-quality papers. The final program featured 40 full papers and 32 short papers.

In these volumes, we also include, as a special section, the papers accepted for the 8th International Conference on Data Management in Cloud, Grid and P2P Systems (Globe 2015), which took place in Valencia, Spain, on September 1, 2015. The Globe conference provides opportunities for academics and industry researchers to present, exchange, and discuss the latest data management research and applications in cloud, grid, and peer-to-peer systems. Globe 2015 received 13 submissions for the research track. Each paper was evaluated by three reviewers on average. The reviewing process led to the acceptance of eight full papers for presentation at the conference and inclusion in this LNCS volume. The selected papers focus mainly on MapReduce framework (e.g., load balancing, optimization), security, data privacy, query rewriting, and streaming.

As is the tradition of DEXA conferences, all accepted papers are published by Springer. Authors of selected papers presented at the conference will be invited to submit extended versions of their papers for publication in the Springer journal Transactions on Large-Scale Data- and Knowledge-Centered Systems (TLDKS).
The success of DEXA 2015 is a result of collegial teamwork from many individuals. We thank Isidro Ramos, Technical University of Valencia, Spain, the honorary chair of DEXA 2015. We thank Vladimir Marik, Czech Technical University, Czech Republic, the publication chair, as well as Marcus Spies, Ludwig-Maximilians-Universität München, Germany, A. Min Tjoa, Technical University of Vienna, Austria, and Roland R. Wagner, FAW, University of Linz, Austria, the workshop chairs. Our appreciations also go to all the PC members, the external reviewers, and the session chairs. Furthermore, we especially express our deep appreciation to Gabriela Wagner, the DEXA secretary, and to the local organization team, for their outstanding work put in over many months.

Finally, we once again thank all the authors, presenters, and participants of the conference. We hope that you enjoy the proceedings.

June 2015

Abdelkader Hameurlain
Qiming Chen
Farouk Toumani
Database and Expert Systems Applications
26th International Conference, DEXA 2015, Valencia, Spain, September 1-4, 2015, Proceedings, Part I
2015, XXXI, 578 p. 175 illus., Softcover
ISBN: 978-3-319-22848-8