PREFACE

Message from the DOLAP 2018 Chairs

The International Workshop On Design, Optimization, Languages and Analytical Processing of Big Data (until 2015 known as the International Workshop on Data Warehousing and OLAP) - DOLAP celebrates this year its 20th anniversary. Previous DOLAP workshops were held in Bethesda, Maryland, USA (1998), Kansas City, Missouri, USA (1999), Washington, DC, USA (2000), Atlanta, Georgia, USA (2001), McLean, Virginia, USA (2002), New Orleans, LA, USA (2003), Washington, DC, USA (2004), Bremen, Germany (2005), Arlington, Virginia, USA (2006), Lisbon, Portugal (2007), Napa Valley, California, USA (2008), Hong Kong, China (2009), Toronto, Ontario, Canada (2010), Glasgow, United Kingdom (2011), Maui, HI, USA (2012), San Francisco, CA, USA (2013), Shanghai, China (2014), Melbourne, VIC, Australia (2015), and Venice, Italy (2017). All editions of DOLAP, including the 2015 one, were associated with the CIKM conference, and the proceedings were published by ACM. Since 2017, DOLAP is associated with the EDBT/ICDT conference, having its proceedings open-access, made available on-line by CEUR-WS (http://ceur-ws.org).

20 years of history, makes DOLAP one of the most recognized and appreciated events worldwide focusing strictly on Data Warehouses and Data Analytics.

Data Warehouse (DW) and Data Analytics (DA) technologies were, are, and will be the core components of Decision Support Systems, regardless whether applied to classical table-like data or Big Data. Research in DW and DA has produced important technologies for the design, integration, storage, management, performance optimization, and data analysis. On the one hand, standard relational-like DW and DA technologies are indispensable for managing and analyzing corporate internal data. New research is and will be conducted in this area, but the trend is to move towards more dynamic self-learning systems that will provide semi-automatic management, tuning, analysis, and even decision making.

On the other hand, the so-called Big Data pose new problems that are more difficult to solve. New challenges in managing Big Data stem not only from large volumes of data but mainly from their heterogeneity, complexity, dynamics, and questionable quality. In the Gartner report "'Top 10 Strategic Technology Trends for 2018"' some envisaged trends related to DW and DA include: advanced artificial intelligence techniques for decision making and for building 'intelligent' software and hardware, even quicker wide-spread of IoT, and distributed computing architectures (e.g., small clouds) located close to data producers.

We observe that papers that DOLAP was receiving within 20 years, addressed hot research and technological challenges following world-wide trends in DW and DA.

For DOLAP 2018 we received 24 submissions. This year, for the first time, we applied 2-phase reviewing process, for the purpose of improving the quality of papers, both in terms of research contributions and clarity of presentations. As the result of this process, 11 papers were accepted for the workshop - 6 regular and 5 short. These papers cover a broad spectrum of topics, including: security, NoSQL storage technologies, ETL, modeling for Big Data, and novel approaches to data analysis.

The DOLAP 2018 Chairs would like to thank the Program Committee Members for their thorough and timely work. This year, 100% of reviews were delivered on time!

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