

# **20th International Conference on Big Data Analytics and Knowledge Discovery - DaWaK 2018**

**Regensburg, Germany  
September 3 - 6, 2018**

<http://dexa.org/dawak2018>

The annual DaWaK conference is a high-quality forum for researchers, practitioners and developers in the field of Big Data Analytics, in a broad sense. The objective is to explore, disseminate and exchange knowledge in this field through scientific and industry talks. The conference covers all aspects of DaWaK research and practice, including data lakes (schema-free repositories), database design (data warehouse design, ER modeling), big data management (tables + text + files), query languages (SQL and beyond), parallel systems technology (Spark, MapReduce, HDFS), theoretical foundations and applications, bringing together active researchers from the database systems, cloud computing, programming languages and data science communities worldwide.

Submissions presenting research work on both systems and theoretical aspects of Big Data storage and analytics are highly encouraged. Submissions on industrial applications and interesting experiences involving big data technology are also encouraged. Papers revisiting classical data mining problems from a big data perspective are encouraged. Generic machine learning or statistical analysis papers without systems, scalability or parallel processing aspects are discouraged. The topics include, but they are not limited to, the following list:

- Theoretical Models for Extended Data Warehouses and Big Data
- Parallel Processing
- Parallel DBMS technology
- Schema-free data repositories
- Modeling diverse big data sources (e.g. text)
- Conceptual Model Foundations for Big Data
- Query Languages
- Query processing and Optimization
- Cost Models for advanced optimization
- Semantics for Big Data Intelligence
- Data warehouses, data lakes
- Big Data Storage and Indexing
- Big Data Analytics: algorithms, techniques, and systems
- Big Data Quality and Provenance Control
- Distributed system architectures
- Exploiting hardware to accelerate processing: multicore CPUs, cache memory, GPUs
- Cloud Infrastructure to manage big data
- Scalability and Parallelization using MapReduce, Spark and related systems
- Graph analytics, including social networks and the Internet

- Visualization
- Big Data Search and Discovery
- Big Data Management for Mobile Applications
- Analytics for Unstructured, Semi-structured, and Structured Data
- Analytics for Temporal, Spatial, Spatio-temporal, and Mobile Data
- Analytics for Data Streams and Sensor Data
- Analytics for Big Multimedia Data
- Real-time/Right-time and Event-based Analytics
- Privacy and Security in Analytics
- Big Data Application Deployment
- Pre-processing and data cleaning to build analytic data sets
- Integration of Data Warehousing, OLAP Cubes and Data Mining
- Analytic workflows

#### Conference Program Committee Co-Chairs

- Carlos Ordonez, University of Houston, USA : [carlos@central.uh.edu](mailto:carlos@central.uh.edu)
- Ladjel Bellatreche, ISAE-ENSMA, France : [Bellatreche@ensma.fr](mailto:Bellatreche@ensma.fr)

#### Important Dates

- Submission of abstracts: March 2, 2018
- Submission of full papers: March 9, 2018
- Notification of acceptance: May 9, 2018
- Camera-ready copies due: June 08, 2018

#### Paper Submission Details

Authors are invited to electronically submit original research contributions or experience reports in English. Submitted papers will be carefully evaluated based on originality, significance, technical soundness, and clarity of exposition.

The submitted manuscript should closely reflect the final paper as it will appear in the Proceedings. The submitted manuscript must be submitted in pdf in LNCS format (<http://www.springer.de/comp/lncs/authors.html>)

The length of submitted manuscripts should not exceed 15 pages. Any submission that significantly exceeds length limits or deviates from formatting requirements may be rejected without review.

For paper registration and electronic submission visit <http://confdriver.ifs.tuwien.ac.at/dexa2018>

**Duplicate submissions are not allowed.** Authors are expected to agree to the following terms: "I understand that the submission must not overlap substantially with any other paper that I am a co-author of or that is currently submitted elsewhere. Furthermore, previously published papers with any overlap are cited prominently in this submission."

Submitted papers will be double checked for duplicate submission comparing them to public paper repositories. Duplicate submissions will be rejected immediately without further review. Questions about this policy or how it applies to a specific paper should be directed to the PC Co-chairs.

### **Accepted Papers**

After a competitive selection process, DaWaK can accept papers as full or short papers. DaWaK reserves the right to accept papers with some weaknesses or not mature enough as short papers (up to 8 pages). Short papers describe interesting and innovative ideas which still require further technical development. All accepted conference papers will be published in a volume of "Lecture Notes in Computer Science" (LNCS) by Springer Verlag. Authors of all accepted papers must sign a Springer copyright release form. Papers are accepted with the understanding that at least one author will register for the conference to present the paper. Papers without any registered co-author will not be published.

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 of Large Scale Data and Knowledge Centered Systems (TLDKS). The submitted extended versions will undergo a further review process.

For further inquiries, please contact the DaWaK 2018 PC chairs.