

# BigVis 2018 | Workshop on Big Data Visual Exploration and Analytics

EDBT/ICDT 2018, March 26, 2018, Vienna, Austria

<http://bigvis2018.imis.athena-innovation.gr>



In the Big Data era, several challenges arise in the field of data visualization and analytics. First, the modern exploration and visualization systems should offer scalable data management techniques in order to efficiently handle billion objects datasets, limiting the system response in a few milliseconds. Besides, nowadays systems must address the challenge of on-the-fly scalable visualizations over large and dynamic sets of volatile raw data, offering efficient interactive exploration techniques, as well as mechanisms for information abstraction and summarization for addressing problems related to visual information overplotting. Further, they must encourage user comprehension offering customization capabilities to different user-defined exploration scenarios and preferences according to the analysis needs. Overall, the challenge is to enable users to gain value and insights out of the data as rapidly as possible, minimizing the role of IT-expert in the loop.

The **BigVis** workshop aims at addressing the above challenges and issues by providing a forum for researchers and practitioners to discuss exchange and disseminate their work. **BigVis** attempts to attract attention from the research areas of *Data Management & Mining*, *Information Visualization* and *Human-Computer Interaction* and highlight novel works that bridge together these communities.

We solicit original contributions of *research*, *work-in-progress*, *vision* and *demonstration* papers addressing the following non-comprehensive list of topics. Selected papers will be invited to the **Special Issue "Big Data Exploration, Visualization and Analytics"** of the **Big Data Research Journal, Elsevier**.

- Visualization and exploration techniques for various Big Data types (stream, high-dimensional, graph)
- Human-centered database techniques
- Indexes and data structures for data visualization
- Raw data visual exploration and analytics
- Incremental and adaptive processing
- Interactive caching and prefetching
- Scalable visual operations (zooming, panning, linking, brushing)
- Big Data visual representation techniques (aggregation, sampling, multi-level, filtering)
- Setting-oriented visualization (display resolution, pixel-oriented, visualization over networks)
- User-oriented visualization (assistance, personalization, recommendation)
- Visual analytics (pattern matching, timeseries analytics, prediction analysis, outlier detection, OLAP)
- Visual and interactive data mining
- Models of human-in-the-loop data analysis
- High performance/Parallel techniques
- Visualization hardware and acceleration techniques
- Linked Data and ontologies visualization
- Systems and tools

## Organizing Committee

Nikos Bikakis | George Papastefanatos | Olga Papaemmanouil

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## Important Dates

**Submission:** December 25, 2017

**Notification:** January 22, 2018

**Camera-ready:** January 29, 2018

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## Program Committee

Alagiannis Ioannis	Athanassoulis Manos	Auber David	Battle Leilani	Binnig Carsten
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