

## Call for Contributions

### Submission:

1. **Inform the Chair:** with the Title of your Contribution

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=DBKDA+2019+Special>

Please select Track Preference as **GraphSM**

### Special track

## GraphSM: Large-scale Graph Analysis, Management and Applications

### Chairs and Coordinators:

Andreas Schmidt, Karlsruhe Institute of Technology / University of Applied Sciences Karlsruhe, Germany

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along with

### DBKDA 2019,

The Eleventh International Conference on Advances in Databases, Knowledge, and Data Applications

June 2 - 6, 2019 - Athens, Greece

<http://www.aria.org/conferences2019/DBKDA19.html>

There exists a growing interest to gather, store and query data from various aspects of human knowledge including geographical data; data about various aspects of human activities like music, literature, and sport; scientific data from biology, chemistry, astronomy and other scientific fields; as well as data presenting the activities of governments and other important institutions.

There is consensus that data should be presented in some form of graph data model where simple and natural abstractions are used to represent data as subjects and their properties described by objects, that is, by means of nodes and edges of a graph.

A number of practical projects that allow for gathering and storing graph data have been started. One of the most famous examples is Linked Open Data (LOD) project that gathered more than 32 giga triples from the areas such as media, geography, government, life sciences and others. The language employed for the representation of data is Resource Description Framework (RDF) which is a form of graph data model.

Storing and managing huge amounts of structured data represents a problem that could be compared to the problem of querying huge amounts of text that appeared after the advent of Internet. The differences are in the degree of structure and semantics that data formats such as RDF and OWL encompass comparing them to HTML.

**Prospective authors** are invited to submit original papers on topics including, but not limited to:

### **THEORY**

Search in graph databases

Algebra and logic of graphs  
Expressive power of graph query languages  
Formalizations of graph databases

## **DATA MODELLING**

Graph data modelling  
Advanced graph data models  
Data modelling for specific graph applications

## **STORAGE MANAGERS**

Indexing methods for graph processing  
Storage systems for large-scale graph databases  
Automatic distribution and replication of graph databases  
Storage managers for specific graph applications

## **QUERY PROCESSING**

Flexible query answering on graph-structured data  
Query processing  
Intelligent distribution of query processing  
Using map-reduce operations for graph processing

## **ANALYSIS AND MANAGEMENT**

Graph pattern matching  
Knowledge discovery from graphs  
Algorithms for graph database processing  
Analysis of graph databases from specific domains  
Information retrieval on graph-structured data

## **APPLICATIONS**

Biological and medical graph databases  
Graph processing for Social Networks  
Visualizing, browsing and navigating graph data  
User-interfaces for graph databases

### **Important Datelines**

- Inform the Chairs: As soon as you decided to contribute  
Submission: April 7, 2019  
Notification: April 27, 2019  
Registration: May 5, 2019  
Camera-ready: May 5, 2019

*Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.*

### **Contribution Types**

- Regular papers [in the proceedings, digital library]  
- Short papers (work in progress) [in the proceedings, digital library]  
- Posters: two pages [in the proceedings, digital library]  
- Posters: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]  
- Presentations: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]

- Demos: two pages [posted on [www.aria.org](http://www.aria.org)]

### **Paper Format**

- See: <http://www.aria.org/format.html>

- Before submission, please check and comply with the editorial rules: <http://www.aria.org/editorialrules.html>

### **Publications**

- Extended versions of selected papers will be published in IARIA Journals: <http://www.ariajournals.org>

- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>

- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

### **GraphSM Chairs**

Dimitar Hristovski, Faculty of Medicine, Ljubljana, Slovenia

Andreas Schmidt, Karlsruhe Institute of Technology / University of Applied Sciences Karlsruhe, Germany

### **GraphSM 2019 Technical Program Committee**

Patrick Appiah-Kubi, University of Maryland University College, USA

Wensheng Gan, Harbin Institute of Technology (Shenzhen), China

Reiko Heckel, University of Leicester, UK

Dimitar Hristovski, Faculty of Medicine, Ljubljana, Slovenia

Erik Hoel, Esri, USA

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Jim Webber, Neo Technology, USA

KwangSoo Yang, Florida Atlantic University, USA

Yang Zhou, Auburn University, USA

Albert Zündorf, Kassel University, Germany

### **Paper Submission**

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### **Registration**

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at <http://www.aria.org/registration.html>

### **Contacts**

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