

**Title:**

High Performance Big Data Management, Analysis, and Mining

**Abstract:**

Modern Big Data increasingly appears in the form of complex graphs and networks. Examples include the physical Internet, the world wide web, online social networks, phone networks, and biological networks. In addition to their massive sizes, these data are dynamic, noisy, and sometimes transient. They also conform to all five Vs (Volume, Velocity, Variety, Value and Veracity) that define Big Data. However, many problems are computationally difficult, and thus big data brings unique challenges, as well as numerous opportunities for researchers, to solve various problems that are significant to our communities.

This workshop aims to bring together researchers from different paradigms solving big problems under a unified platform for sharing their work and exchanging ideas. We are soliciting novel and original research contributions related to big data management, analysis, and mining (algorithms, software systems, applications, best practices, performance). Significant work-in-progress papers are also encouraged.

**Scope and Topics:**

Papers can be from any of the following areas, including but not limited to:

- ✧ Parallel algorithms for big analysis on HPC systems
- ✧ Heterogeneous CPU-GPU solutions to solve big problems
- ✧ Sampling and summarization of large data
- ✧ Graph clustering, partitioning, and classification methods
- ✧ Inference on large data
- ✧ Novel querying and indexing strategies for RDF data
- ✧ Novel applications of big problems in bioinformatics, health care, security, and social networks
- ✧ New software systems and runtime systems for big data mining

**Program Committee Chairs:**

**Guohua Liu**, Donghua University, China  
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Guohua Liu is a professor of Donghua University. He obtained the Ph.D. degree from Fudan University. His research interests include outsourced data management, query processing on uncertainty data, etc. By now, he has published more than 50 top-level papers. He is an advanced member of CCF, a member of Database Professional Committee, and a member of Theoretical computer professional committee.

**Feifei Li**, Utah State University, USA

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Feifei Li is an Associate Professor in the School of Computing at University of Utah. He obtained the Ph.D in computer science from the Computer Science Department at Boston University in summer 2007, and was an Assitant Professor in the Computer Science Department at Florida State University from Aug 2007 to Aug 2011. His research interests include data stream, large-scale data management and indexing, parallel data processing and analysis, query processing on uncertainty data, etc. By now, he has published more than 40 top-level papers on the main international conference and journals. He is the owner of the best paper award of ICDE2004 and ICDE2014 ten years best paper.

### **Program Committee:**

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