

**Title:**

Big Data Managing, Processing and Analysis

**Abstract:**

As data continues to be produced in massive amounts, with increasing volume, velocity and variety, Big Data managing, processing and analysis gains meaningful insights and significant outcomes. Big Data science is the convergence of large-scale data infrastructure and applied data science, and it is much more than just data bits and bytes on one side and processing on the other. By applying the powerful technology of Cloud Computing, Machine Learning and Data Mining, the potential and hidden values of large-scale data can be extracted, analyzed and predicted to impact on a wide range of domains, such as parallel and distributed computing, financial and economical informatics, Internet searches, computer vision, health care, bio-medical research, etc. Moreover, Big Data has already expanded into an ecosystem that includes technologies like Artificial Intelligence (AI) and the Internet of Things (IoT) to a large extent.

The purpose of this workshop is to bring researchers together among research institutions and industries to solve the current multiple problems associated with Big Data by sharing their work and exchanging ideas, and explore various cutting-edge algorithms, tools and technologies in Big Data fields.

**Scope and Topics:**

Significant work-in-progress papers are also encouraged. Papers can be from any of the following areas, including but not limited to:

- ✧ Cloud-based big data solutions
- ✧ Cloud computing
- ✧ Heterogeneous CPU-GPU solutions to solve big problems
- ✧ Parallel and distributed computing
- ✧ Machine and deep learning
- ✧ Artificial intelligence
- ✧ High-performance data analytics
- ✧ Data search and representation
- ✧ New software systems and runtime systems for big data

**Program Committee Chairs:**

**Xiaoping Fan**, Hunan University of Finance and Economics, China  
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Dr. Xiaoping Fan from Hunan University of Finance and Economics, also, he is a Professor, doctoral tutor. Former director of Academic Affairs Office of Changsha Railway Institute, vice president of Information Engineering, Automation Engineering Research Center and other staff, Central South University Degree Assessment Committee Office Director (Graduate School Degree Section Director), Central South University Institute of Network Systems , Concurrently Central South University School of Information Science and Engineering professor. Published 182 journals and academic conference papers, 80 papers are indexed by SCI, EI, ISTP. It has obtained more than 40 projects of National Natural Science Foundation, National 863 Program, Ministry of Science and Technology International Cooperation, Ministry of Education, Ministry of Railways, Hunan Province and Guangdong Province.

**Yang Xiao**, University of Alabama, USA

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Dr. Yang Xiao is a professor of Department of Computer Science at The University of Alabama. His research areas include Cyber Physical Systems, Security, Internet of Things, Wired/Wireless Networks, Smart Grid, and Telemedicine. Dr. Xiao's research has been supported by the US National Science Foundation (NSF), U.S. Army Research, Global Environment for Network Innovations (GENI), Fleet & Industrial Supply Center San Diego (FISCSD), FIATECH, and The University of Alabama's Research Grants Committee. He has published more than 200 SCI-indexed journal papers (including 50 IEEE transactions papers) and over 200 refereed conference papers and book chapters related to these research areas.

**Guang Sun**, Hunan University of Finance and Economics

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Dr. Guang Sun works at Hunan University of Finance and Economics, served as deputy dean of Big Data Institute of Finance and Economics. His research falls under the umbrella of Big Data. Specially, Data-Driven Decisions in Financial Services, Large data stream processing on cloud and Big Graph Data Analysis and Visualization. He has published more than 20 SCI-indexed and EI-indexed journal papers and over 50 refereed conference papers and book chapters related to these research areas.

### **Program Committee:**

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