

**Title:**

Practical Big Data

Abstract:

Big Data has become an ubiquitous cross-industry term to describe vast amounts of large data sets that are challenging to store, search, share, visualize, analyze, and learn. Effective management and analysis of the Big Data would bring great benefits and unique opportunities to the users. However, there are still many open issues for deep investigation. The Practical Big Data Workshop in ICAIS 2019 is to promote the research in this emerging area of Big Data-intensive Research, Development, Computing, Algorithms, Systems, and Applications. The Practical Big Data workshop in ICAIS 2019, aims to bring together builders and users of practical big data analytics systems to share research results, experiences and new ideas. It solicits high-quality papers that illustrate novel Big Data models, architecture and infrastructure, management, search and processing, security and privacy, applications, surveys and industrial experiences.

Scope and Topics:

Potential topics include but are not limited to:

- ✧ Big Data Applications
- ✧ • Big Data Applications and Software in Science, Engineering, Healthcare, Finance, Business, Transportation, Telecommunications, etc.
- ✧ • Big Data Analytics in Small Business Enterprises, Public Sector and Government.
- ✧ • Big Data Industry Standards
- ✧ • Development and Deployment Experiences with Big Data Systems.
- ✧ Integrating Big Data in to treatment planning: Applications in treatment plan automation and evaluation
- ✧ Wrangling Radiomics: Applications of big data with conventional and Artificial Intelligence based approaches
- ✧ Approaching a New Big Data Based Radio-Biology: Using big data to create more comprehensive outcomes models
- ✧ Clinical Practice Big Data: Application to support safety and clinical practice improvement
- ✧ Integrating the voice of the patient in to Big Data: Collection, standardization and application of Patient Reported Outcomes and other measures...
- ✧ Big Data Theory and Foundation
- ✧ • Theoretical and Computational Models for Big Data
- ✧ • Theories and Methodologies for Big Data Processing
- ✧ • Architectures and Designs of Big Data Processing Systems
- ✧ • Information Quantitative and Qualitative for Big Data



- ✧ Big Data Infrastructure
 - ✧ • Cloud/Grid/Stream Computing for Big Data
 - ✧ • System Architectures, Platforms, Design, and Deployment for Big Data
 - ✧ • High Performance/Parallel Computing Platforms for Big Data
 - ✧ • Energy-efficient Computing for Big Data
 - ✧ • Programming Models and Environments for Cluster, Cloud, and Grid Computing
- ✧ Big Data Management
 - ✧ • Data Model and Structure for Big Data
 - ✧ • Advanced Database and Web Applications for Big Data
 - ✧ • Data Preservation and Provenance
 - ✧ • Data and Information Integration and Fusion for Big Data
 - ✧ • Interfaces to Database Systems and Analytics Software
 - ✧ • Scientific and Social Data Management and Workflow Optimization
- ✧ Big Data Search and Processing
 - ✧ • Data Management for Mobile, Pervasive and Grid Computing
 - ✧ • Algorithms and Architectures for Big Data Search, Mining and Processing
 - ✧ • Big Data Search Architecture, Scalability, and Efficiency
 - ✧ • Search, Store and Process Big Data in Distributed, Grid and Cloud Systems
 - ✧ • Semantic-based Big Data Analytics and Processing
 - ✧ • Multi-Structured Multi-Domain Big Data Fusion and Integration
 - ✧ • Ontology Representations and Processing in Big Data
 - ✧ • Automatic and Machine Learning Methods for Big Data
 - ✧ • High Performance and Efficiency Data Cryptography
 - ✧ • Privacy Threats Analysis for Big Data Systems
 - ✧ • Visualizing Large-Scale Security Data
 - ✧ • Security and Risk in Big Data Processing
 - ✧ • Hadoop and MapReduce based Approaches for Big Data Processing
- ✧ Big Data Protection, Security and Privacy
 - ✧ • Threat and Intrusion Detection for High-Speed Networks
 - ✧ • Trust, Reputation and Recommendation Systems for Big Data Systems
 - ✧ • Privacy and Security Preservation for Multi-Level Security (MLS)
- ✧ Cross-domain Big Data Computing System

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Dr. Fan Xiaoping is a professor, doctoral tutor. He joined the work in September 1984 and joined the party in 1997. In June 1999, he served as deputy dean of the School of Information Engineering of Changsha Railway Institute. In October 1999, he served as deputy director of the Academic Affairs Office of Changsha Railway Institute. In January 2000, he served as director of the Academic Affairs Office of Changsha



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SUN Guang received his PhD in Computer Science from Hunan University, CHN, in 2012. He is currently a Associate Professor in the Institute of Big Data at the Hunan University of Finance and Economics, Changsha, HUNAN, CHN. His research interests fall under umbrella of Big Data and information hiding (with a focus on big data property of finance, software watermarking and software birthmarking). His research has been supported by Open Foundation for University Innovation Platform from Hunan Province, China (Grant no. 16K013).

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