



Call for Papers

Symposium on Selected Areas in Communications: Big Data Track

Track Co-Chairs

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Scope and Motivation

With the human society stepping into the era of data-driven digital economy, the digitization represented by big data has become one of the development trends of global information technology. Data contain valuable information that can be mined and analyzed for the understanding of the systems that produce them. The unprecedented increase in data generated by all kinds of devices urges for the constant development of communication networks to allow large amounts of data to be transferred, as well as for the improvement in data storage and processing techniques. The pursue of more data has led to large volume of data, explosive growth of data scale and increased complexity of data patterns. Heterogeneity in applications requirements and data transfers behavior open avenues for research and development of new ways of dealing with the so-called “Big Data”.

The Big Data Track in the Selected Areas in Communications Symposium aims to attract submissions from academia, industry, and government, welcoming new scientific and technical contributions and literature reviews on relevant Big Data topics.

Topics of Interest

The Big Data track seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Big business and industries
- Big Data acquisition, integration, cleaning, and practices
- Big Data architecture, infrastructure and platforms
- Big Data classifications, benchmarks and metrics
- Big Data for astronomy
- Big Data for biological, biomedical, and health science and technologies
- Big Data for multimedia and image processing
- Big Data for smart cities and smart homes

- Big Data for social networks
- Big Data in and for research, science and technology
- Big Data in, with, and for cloud computing and networking
- Big Data in, with, and for communications and networking
- Big Data integration and visualization
- Big Data maintenance, management, and operations
- Big Data models, theories, algorithms, approaches, and solutions
- Big Data placement, scheduling, and optimization
- Big Data practices and applications
- Big Data retrieval, processing, analysis, and analytics
- Big Data semantics, scientific and knowledge discovery and intelligence
- Big Data standardization and regulation
- Big Data storage and management
- Big Data with and for smart grids
- Big Data with Internet of Things/cyber-physical systems
- Big Data with relevant signal processing techniques
- Data lifecycle
- Distributed and federated datasets
- Evaluations, simulations and debugging and tools relevant to Big Data
- File systems and databases for Big Data
- Green issues for and by Big Data
- Inquiries and programming languages for Big Data
- Machine learning, data mining, web mining, and graph mining
- Mobility and Big Data
- Policy making and legal issues in Big Data
- Privacy protection, trust in Big Data
- Quality of experiences and quality of services of Big Data
- Security in Big Data

Important Note

The authors of selected papers from this track will be invited to submit an extended version of their work for fast-track review and possible publication in the IEEE Open Journal of the Communications Society.

Important Dates

Paper Submission: 11 October 2022

Notification: 18 January 2023

Camera Ready and Registration: 15 February 2023

How to Submit a Paper

All papers for technical symposia should be submitted via EDAS. Full instructions on how to submit papers are provided on the IEEE ICC 2023 website: <https://icc2023.ieee-icc.org/>