

# IEEE Global Communications Conference

4-8 December 2022 – Rio de Janeiro, Brazil

*Accelerating the Digital Transformation through Smart Communications*



## CALL FOR PAPERS AND PROPOSALS

### ***Selected Areas in Communications*** ***Big Data***

#### Symposium Co-Chairs

- Luiz F. Bittencourt, University of Campinas, Brazil, [bit@ic.unicamp.br](mailto:bit@ic.unicamp.br)
- Bin Cao, Beijing University of Posts and Telecommunications, China, [caobin@bupt.edu.cn](mailto:caobin@bupt.edu.cn)

#### 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. 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. Data attacks generated by the explosive growth of data scale, the high complexity of data patterns and the deep integration of big data technology and various vertical industries. Heterogeneity in applications requirements and data transfers behavior opens 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 in the Selected Areas in Communications Symposium seeks original contributions in the following topics, plus others that are not explicitly listed but are closely related:

- Data driven approaches and technologies
- Data intensive sciences and technologies
- Data analytics and analysis
- Artificial and computational intelligence

- Machine learning, data mining, web mining, and graph mining
- Big data models, theories, algorithms, approaches, solutions
- Big data performance analysis and deployment
- Big data maintenance, management, and operations
- Big data placement, scheduling, and optimization
- Big data practices and applications
- Big data meet green challenges
- Big data integration and visualization
- Data lifecycle
- Distributed and federated datasets
- Big data retrieval, processing, analysis, and analytics
- Big data semantics, scientific and knowledge discovery and intelligence
- Big data acquisition, integration, cleaning, and practices
- Big data architecture, infrastructure and platforms
- Big data classifications, benchmarks and metrics
- Big data standardization and regulation
- Big data storage and management
- Evaluations, simulations and debugging and tools relevant to big data
- File systems and databases for big data
- Inquiries and programming languages for big data
- Policy making and legal issues in Big Data
- Security in Big Data
- Privacy protection, trust in Big Data
- Quality of experiences and quality of services of big data
- Big business and industries
- 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, sciences and technologies
- Big data in, with, and for cloud, edge, and fog computing
- Big data in, with, and for networking, future networks, ICN, SDN, and NFV
- Big data in, with, and for future wireless networks, 5G, 6G
- Big data with and for smart grids
- Big data with Internet of Things/cyber-physical systems
- Big data with relevant signal processing techniques
- Big sciences and technologies
- Inquiries and programming languages for big data
- Mobility and big data

## Important Dates

Paper Submission: 15 April 2022

Notification: 25 July 2022

Camera Ready and Registration: 1 September 2022

## 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 Globecom 2022 website: <https://globecom2022.ieee-globecom.org/>