IEEE International Conference on Communications
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Scaling the Peaks of Global Communications

Call for Papers
Signal Processing for Communications Symposium

Symposium Co-Chairs

- **Yanjun Pan, University of Arkansas, USA – yanjunp@uark.edu**
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Scope and Motivation

Signal processing plays a pivotal role in the development of modern communications technologies. Advanced algorithms are designed, and sophisticated modules are developed to provide innovative solutions for contemporary and emerging communications and sensing systems. Considering the diverse and fast-growing nature of research in this wide field, the Signal Processing for Communications Symposium welcomes original contributions in all pertinent aspects of signal processing for wireless and wired systems, including algorithmic design and analysis, implementation of signal processing and learning schemes, as well as communication, localization, and sensing applications. High quality papers from both industry and academia are encouraged. As Colorado is a national hub for the Cable, Space, and Satellite Communication Industries, submissions on topics of interest to these industries are especially welcome.

Topics of Interest

The Signal Processing for Communications Symposium seeks original contributions in the following topical areas, plus others that are not explicitly listed, but are closely related to:

- Channel estimation, acquisition, and equalization
- Compressive sensing and sparse signal processing algorithms
- Decentralized and cooperative signal processing
- Interference management techniques in communications systems
- Localization, positioning, and tracking techniques
- Signal processing for integrated communications and sensing
- Signal processing for artificial intelligence, data analytics, machine learning
- Signal processing for delay-Doppler domain communications, such as OTFS
- Signal processing for next generation multiple access
- Signal processing for radio-imaging
- Signal processing for near-field communication and sensing
- Signal processing for green communications, smart grid, powerline communications, energy harvesting, and wireless power transfer
- Signal processing for millimeter and THz communication systems
- Signal processing for multi-antenna, MIMO, and/or multi-user systems
- Signal processing for optical communications

- Signal processing for security enhancement, particularly physical layer security and privacy
- Signal processing for emerging wireless hardware architectures (e.g., adaptive antennas, reconfigurable intelligent surfaces, metasurface-based antennas, holographic MIMO, XL-MIMO)
- Signal processing techniques for software defined radio, cognitive radio, and physical-layer network slicing
- Signal transmission, detection, and synchronization
- Spectrum sensing, shaping, and management techniques

Journal Publication Opportunity

The authors of selected papers from this symposium 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 2023
Notification: 18 January 2024
Camera Ready and Registration: 15 February 2024

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 2024 website: https://icc2024.ieee-icc.org/