



Call for Papers for *Signal Processing for Communications Symposium*

Symposium Co-Chairs

- Shaodan Ma, University of Macau, Macao SAR, China, shaodanma@um.edu.mo
- Jing Yang, The Pennsylvania State University, U.S.A., yangjing@psu.edu
- George C. Alexandropoulos, National and Kapodistrian University of Athens, Greece, alexandg@di.uoa.gr

Scope and Motivation

Signal processing plays a pivotal role in the development of modern communication technologies. Advanced algorithms are designed and sophisticated modules are developed to provide innovative solutions for contemporary and emerging communication systems. Considering the diverse and fast-growing nature of research in this field, the Signal Processing for Communications symposium welcomes original contributions in all pertinent aspects of signal processing for communication systems, including algorithmic design and analysis, implementation of signal processing schemes, as well as communication applications. High quality papers from both industry and academia are encouraged.

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:

- Adaptive antennas and beamforming
- Channel estimation, acquisition, and equalization
- Compressive sensing and sparse signal processing algorithms
- Decentralized and cooperative signal processing
- Distributed signal processing for edge computing
- Interference cancellation techniques in communications systems
- Localization, positioning, and tracking techniques
- Novel architectures for signal demodulation and decoding
- Signal processing for centralized/distributed systems
- Signal processing for data analytics and machine learning
- Signal processing for green 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 sensor networks and IoT applications
- Signal processing for single-carrier, OFDM / OFDMA, multicarrier systems including new waveforms
- Signal processing for smart grid and powerline communications
- Signal processing for software defined and cognitive radio
- Signal processing for emerging wireless hardware architectures, including reconfigurable metasurfaces
- Signal processing techniques for commercial/standardized and emerging systems
- Signal processing techniques for full-duplex communications
- Signal processing techniques for physical layer network slicing
- Signal processing techniques in 5G and beyond
- Signal transmission, detection, and synchronization
- Spatial transmission and distributed transmission techniques
- Spectrum sensing, shaping, and management techniques

Important Dates

Paper Submission: 12 October 2020

Notification: 25 January 2021

Camera Ready and Registration: 22 February 2021

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 ICC2021 website: <https://icc2021.ieee-icc.org/>