



IEEE International Conference on Communications
20-24 May 2019 // Shanghai, China
Empowering Intelligent Communications

CALL FOR PAPERS

SIGNAL PROCESSING FOR COMMUNICATIONS (SPC) SYMPOSIUM

Symposium Co-Chairs

Jingxian Wu, University of Arkansas, USA
wuj@uark.edu

Yongming Huang, Southeast University, China
huangym@seu.edu.cn

Yi Ma, University of Surrey, UK
y.ma@surrey.ac.uk

Scope and Topics of Interest

Signal processing is a critical part of the development of most of the modern communication technologies. Advanced signal processing algorithms are designed and modules are developed to provide innovative solutions to 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 communications, including design, analysis, implementation, and applications.

The issues covered in the Signal Processing for Communications symposium are broad, spanning from traditional transceiver design to state-of-the-art signal processing methodologies in contemporary and emerging communication systems, and application to new frontiers including cognitive radio and smart grid. Our intention is to provide a comprehensive coverage of signal processing methodologies, theories and practices in prevalent and next-generation communication systems and networks. Topics of interest to the Signal Processing for Communications symposium include, but are not limited to:

- Signal processing techniques in 5G
- Spatial transmission and distributed transmission techniques
- Signal processing for multi-antenna and/or multi-user systems
- Signal processing for centralized/distributed multi-node systems
- Signal processing techniques for full-duplex communications
- Interference cancellation techniques in communications systems including NOMA
- Signal processing techniques for physical layer network slicing
- Decentralized and cooperative signal processing in networked systems
- Signal processing for single-carrier, OFDM / OFDMA, multicarrier systems including new waveforms
- Signal processing for green communications, energy harvesting and wireless power transmission

- Signal processing for security enhancement particularly physical layer security
Channel estimation and equalization
- Signal transmission, detection and synchronization
- Spectrum sensing, shaping, and management techniques
- Novel architectures for signal demodulation and decoding
- Compressive sensing algorithms
- Signal processing techniques for commercial/standardized and emerging systems
- Signal processing for sensor networks and IoT applications
- Signal processing for software defined and cognitive radio
- Adaptive antennas and beamforming
- Signal processing for optical communications
- Signal processing for millimeter and Tera-Hz communication systems
- Signal processing for smart grid and powerline communications
- Localization, positioning and tracking techniques
- Signal processing for data analytics and machine learning

Submission Guidelines

The IEEE ICC 2019 website provides full instructions on how to submit papers and the paper format.

You will select the desired symposium when submitting papers.

The paper submission deadline is October 14, 2018.

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at <http://edas.info/>