



**IEEE International Conference on Communications
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COMMUNICATIONS FOR CONNECTING HUMANITY



CALL FOR PAPERS

SIGNAL PROCESSING FOR COMMUNICATIONS SYMPOSIUM

Symposium Co-Chairs

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Scope and Topics of Interest

Signal processing plays a pivotal role in the development of 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 relevant aspects of signal processing for communications and networking, including design, analysis, implementation, and application.

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
- Signal processing techniques for full-duplex communications
- Interference cancellation techniques in communications systems including NOMA
- Spatial transmission and distributed transmission techniques
- Channel estimation, equalization
- Signal detection and synchronization
- Novel architectures for signal demodulation and decoding
- Signal processing for single-carrier, OFDM and OFDMA systems
- Signal processing for spread-spectrum, CDMA, ultra-wideband systems
- Multi-antenna (SIMO, MISO, MIMO, Massive MIMO) and multi-user systems
- Distributed, decentralized, and cooperative signal processing in networked systems
- Compressive sensing algorithms
- Signal processing techniques for commercial/standardized (LTE, LTE/A, WiMAX etc.) and other emerging systems
- Signal processing for sensor networks and internet of things (IoT)
- Signal processing for software defined and cognitive radio
- Adaptive antennas and beamforming
- Signal processing for green communications, communications powered by energy harvesters and wireless power transmissions

- Signal processing for security and cryptography
- Signal processing for optical communications
- Signal processing for Nano (molecular and EM) communications
- Signal processing for millimeter and Tera-Hz communication systems
- VLSI/ASIC/FPGA circuits and systems for communications
- Multimedia (Speech, image and video) signal processing
- Signal processing for smart grid and powerline communications
- Localization, positioning and tracking techniques
- Signal processing for big data
- Machine learning, and stochastic geometry-based signal processing for 5G
- Fast or low-complexity signal processing algorithms for ubiquitous communication technologies

Submission Guidelines

The IEEE ICC 2018 website provides full instructions on how to submit papers & the paper format.

You will select the desired symposium when submitting.

The paper submission deadline is October 15, 2017.

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