



IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS  
7 - 11 June 2020 // Dublin, Ireland  
*Communications Enabling Shared Understanding*



## Call for Papers

### Signal Processing for Communications Symposium

#### Symposium chairs

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#### Scope and Topics of Interest

Signal processing is a critical part of the development of most 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:

- Adaptive antennas and beamforming
- Channel estimation and equalization
- Compressive sensing algorithms
- Decentralized and cooperative signal processing in networked systems
- Interference cancellation techniques in communications systems including NOMA
- Localization, positioning and tracking techniques
- Novel architectures for signal demodulation and decoding
- Signal processing for centralized/distributed multi-node systems

- Signal processing for data analytics and machine learning
- Signal processing for green communications, energy harvesting and wireless power transmission
- Signal processing for millimeter and Tera-Hz communication systems
- Signal processing for multi-antenna and/or multi-user systems
- Signal processing for optical communications
- Signal processing for security enhancement particularly physical layer security
- 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 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

### **Submission Guidelines**

The IEEE ICC 2020 website ([icc2020.ieee-icc.org](http://icc2020.ieee-icc.org)) provides full instructions on manuscript format and how to submit a manuscript. You will select the desired symposium/track when submitting your manuscript.