

Call for Papers

Globecom 2012, Anaheim, California, USA

Signal Processing for Communications Symposium

Co-Chairs

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Scope and Motivation

Nowadays, the low-cost light-weight transceivers are facilitated on the real-time powerful digital signal processing platforms. The advanced signal processing techniques help communication systems progress into a new page. More and more signal processing modules are designed and studied to provide novel solutions to new communication standards and technologies. The Signal Processing for Communications Symposium welcomes papers dealing with the algorithmic and implementation aspects within the topics listed below. Of special interest are the design of new algorithms and schemes for communication systems, as well as performance analysis and practical implementation. The emerging issues which are addressed in this symposium include but are not limited to distributed estimation and detection, low-power and low-complexity signal processing modules, cross-layer optimization for signal quality enhancement, advanced beamforming, jointly optimal solutions for modulation, coding, estimation, synchronization and detection, channel modeling and its effects for transmitter/receiver adaptation, and spectrum sensing. Especially, the state-of-the-art signal processing methodologies, theories and practices in the prevalent communication standards in 3G/4G, LTE/LTA, WLAN, WMAN, WiMAX, UWB, are of great interest.

Topics of Interest

- Adaptive Antennas and Beamforming
- Blind Signal Processing for Communications
- Channel Estimation, Modeling and Equalization
- Multi-user Systems
- SIMO, MISO and MIMO Systems
- OFDM and Multi-carrier Systems
- Novel Signal Processing Modules in LTE/LTA
- New Signal Processing Techniques in CDMA or WCDMA
- Space-Time Processing and Decoding
- Signal Detection and Synchronization
- Software Defined Radio
- Signal Processing Interfaces in Cognitive Radio
- Speech, Image and Video Signal Processing
- Spectrum Shaping and Filters

- Signal Processing for Spatial, Temporal, Code and Spectral Diversities
- Transmitter and Receiver Techniques
- Compressive Sensing and Compressive Sampling