GLOBECOM 2010 CALL FOR PAPERS - SIGNAL PROCESSING FOR COMMUNICATIONS SYMPOSIUM

Symposium Co-Chairs

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Sponsoring Technical Committees

- Signal Processing & Communications Electronics
- Wireless Communications
- Communication Theory

Scope

At the present time, low-cost and light-weight transceivers are being incorporated into real-time powerful digital signal processing platforms. More and more signal processing modules are being studied and designed to provide innovative solutions to new communication standards and technologies. Consequently, advanced signal processing techniques are helping communication systems to rapidly progress into a new era. 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. Also of great interest are state-of-the-art signal processing methodologies, theories and practices in prevalent communication standards such as 3G/4G, LTE/LTA, WLAN, WMAN, WiMAX, UWB.

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
- Multimedia Communication Technologies
- Spectrum Shaping and Filters
- Signal Processing for Spatial, Temporal, Code and Spectral Diversities
- Transmitter and Receiver Techniques

Technical Program Committee (Tentative)

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