

IEEE Wireless Communications and Networking Conference

3-6 April 2016 // Sheraton Doha Resort and Convention Center // Doha, Qatar

**WCNC
2016**



IEEE



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IEEE WCNC is the premier event for wireless communications researchers, industry professionals, and academics interested in the latest development and design of wireless systems and networks. Sponsored by the IEEE Communications Society, IEEE WCNC has a long history of bringing together industry, academia, and regulatory bodies. In 2016, Doha will become the wireless capital by hosting IEEE WCNC 2016. The conference will include technical sessions, tutorials, workshops, and technology and business panels. You are invited to submit papers in all areas of wireless communications, networks, services, and applications. Potential topics include, but are not limited to:

CALL FOR PAPERS

Track 1: PHY and Fundamentals

- Channel modeling, characterization, and estimation
- Modulation, coding, diversity, equalization, synchronization
- OFDM, multi-carrier modulation
- Interference modeling, management, cancellation, and alignment
- Space-time coding, beamforming, MIMO, massive MIMO
- Cooperative, device-to-device, and multihop communications
- Cognitive radio, spectrum sensing
- PHY layer design for cellular, wireless LAN, ad hoc, and sensor networks
- Energy efficient PHY layer design, energy harvesting
- PHY layer security
- Ultra wideband, mmWave, and sub-THz communications
- Information-theoretic aspects of wireless communications
- Signal processing for wireless communications
- VLSI and RF circuits for wireless communications
- Molecular and nano-communications

Track 3: Mobile and Wireless Networks

- Localization for wireless networks
- Network estimation and processing techniques
- Mesh, relay, sensor and ad hoc networks
- Mobility, location, and handoff management
- Mobile and wireless IP
- Wireless multicasting, routing
- Robust routing
- Multimedia QoS and traffic management
- Wireless broadcast, multicast and streaming
- Congestion and admission control
- Proxies and middleware for wireless networks
- Wireless network security and privacy
- Performance of E2E protocols over wireless networks

Track 2: MAC and Cross-Layer Design

- Wireless MAC protocols for 5G: design, analysis, and optimization
- Cognitive and cooperative MAC
- MAC for mesh, ad hoc, relay, and sensor networks
- Scheduling and radio resource management
- Cross-layer MAC design
- Software defined radio, RFID MAC
- QoS support and energy efficient MAC
- MAC protocol for energy harvesting wireless networks
- MAC design for multi-tier cellular/small cell networks
- Multiple access in machine-to-machine communications
- MAC for cloud radio access networks (Cloud-RANs)
- MAC protocols for molecular and bacterial nano networks

Track 4: Services, Applications, and Business

- Emerging wireless/mobile applications
- Context and location-aware wireless services & applications
- Wireless telemedicine and e-health services
- Intelligent transportation systems
- Cognitive radio and sensor-based applications
- Content distribution in wireless home environment
- Wireless emergency and security systems
- Service oriented architectures, service portability
- SIP based services, multimedia, QoS support, middleware
- Innovative user interfaces, P2P services for multimedia
- Dynamic services, autonomic services
- Regulations, standards, spectrum management
- Test-bed and prototype implementation of wireless services

CALL FOR TUTORIALS

Proposals for tutorials and workshops are solicited on hot topics for future wireless communications systems and applications.

CALL FOR PANELS

Panel proposals are also solicited on technical, business and policy-related issues and opportunities for the wireless communications industry.

Accepted and presented papers will be published in the IEEE WCNC 2016 Conference Proceedings and submitted to IEEE Xplore® as well as other Abstracting and Indexing (A&I) databases. Full details of submission procedures and requirements for authors of accepted papers are available at www.ieee-wcnc.org/2016.

IMPORTANT DATES

Paper submission deadline:	15 September 2015	Tutorial proposals: September 30, 2015 15 September 2015
Notification of acceptance:	15 December 2015	Workshop proposals: July 12, 2015 28 June 2015
Final Camera-ready papers due:	12 January 2016	Panel proposals: September 30, 2015 15 September 2015

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