



IEEE WCNC is the premier wireless 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 2010, IEEE WCNC will be held on the beautiful side of the Darling Harbour in Sydney, Australia.

IEEE WCNC 2010 will include technical sessions, tutorials, technology/business panels, and exhibitions. You are invited to submit papers in all areas of wireless communications, networks, services, and applications. Potential topics are solicited in, but are not limited to, the following categories:

I. PHY TRACK

- Interference Characterization and Avoidance for Cognitive Radio
- Multi-Hop and Cooperative Communications
- Modulation, Coding, Diversity
- Equalization, Synchronization and Acquisition Techniques
- Space-Time, MIMO, Adaptive Antennas
- OFDM, CDMA, Spread Spectrum
- Channel Modeling and Characterization
- Interference Cancellation and MUD
- Iterative Techniques
- Physical Layer Algorithms
- Information-Theoretic Aspects of Wireless Communications
- Ultra-Wide Bandwidth Communication
- Machine Learning for Communication Systems
- Signal Processing for Wireless Communications

III. NETWORKS TRACK

- 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
- 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
- Interworking Heterogeneous Wireless/Wireline Networks
- Capacity, Throughput, Outage, Coverage

II. MAC TRACK

- Multiple Access Techniques
- Cognitive and Cooperative MAC
- MAC for Mesh, Ad Hoc, Relay and Sensor Networks
- Network Information Theory
- Radio Resource Management and Allocation, Scheduling
- Cross-Layer Design, Cross-Layer Security
- Congestion and Admission Control
- Software Defined Radio, RFID
- MAC for Multimedia
- Wireless MAC Protocols: Design and Analysis
- B3G/4G Systems, WiMAX, WLAN, WPAN
- QoS Provisioning in MAC

IV. SERVICES & APPLICATIONS TRACK

- Emerging Wireless/Mobile Applications
- Context and Location-Aware Wireless Services and 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, Peer-to-Peer Services for Multimedia
- Dynamic Services, Autonomic Services
- AAA, Application-Oriented Network Management
- Regulations, Standards, Spectrum Management
- Test-Bed and Prototype Implementation of Wireless Services
- Personalization, Service Discovery, Profiles and Profiling

CALL FOR TUTORIALS

Proposals for half/full day tutorials are also solicited based on the topics listed above or others related to issues and opportunities for the future of wireless communications, systems, and applications. Tutorial presenters will receive compensation.

CALL FOR TECHNOLOGY/BUSINESS PANELS

Proposals are solicited for Technology/Business Application Panels in the above mentioned topical areas or others related to business and policy-related issues and opportunities for the wireless communications industry.

IMPORTANT DATES

Full Paper Submission Deadline: Friday 2 October 2009
Final Camera Ready Copy: Monday 4 January 2010

Acceptance Notification: Monday 30 November 2009

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