### IEEE GLOBECOM 2005, St. Louis, Missouri, USA

28 November - 2 December, 2005

# Wireless Communications Symposium

## **CALL FOR PAPERS**

The IEEE GLOBECOM 2005 Wireless Communications Symposium will be held in St. Louis, Missouri. The Wireless Communications Symposium will include topics related to all aspects of wireless and mobile communications at all layers of the network protocol suite and all wireless communications systems including cellular networks, wireless LAN, ad hoc networks, sensor networks, and satellite systems. Submissions are now welcome original research papers covering the following topics. Topics are sub-categorized into three main streams of "Wireless Air Interface and Link Control," "Wireless Network and Transport," and "Wireless Services and Applications". Authors should specify at the time of submission to which topic(s) and stream their paper is best suited. For details about submission deadline, paper format, and on-line submission procedure please see the main GLOBECOM 2005 page at http://www.ieee-globecom.org/2005/.

#### WIRELESS COMMUNICATIONS SYMPOSIUM – LIST OF TOPICS

#### **Wireless Air Interface and Link Control**

- Modulation, coding, and diversity techniques
- Channel modeling and characterization
- Radio resource management
- Wireless medium access control techniques
- Link design aspects for emerging technologies
- Software defined and smart antenna technologies
- CDMA, TDMA, OFDM air interfaces
- Power control algorithms
- Error and link control
- Interference avoidance and cancellation
- Multi-user detection
- Spectrum efficiency
- Link-layer handoff and mobility models
- Traffic management

- Cell and capacity planning
- Wireless capacity evaluation and enhancement
- Satellite communications channel
- Ultra-wideband communications
- Adaptive modulation techniques
- Resource allocation and interference management
- Multi-rate and multi-carrier communications
- Space-time processing and coding
- MIMO systems
- Fading countermeasures
- Propagation and channel characterization
- DSP applications to wireless systems
- Signal separation and interference rejection
- Diversity, synchronization, and equalization

#### **Wireless Network and Transport**

- PCS, GPRS, EDGE, 3GPP, UMTS network design
- IMT2000 and beyond cellular systems
- 4G mobile network architectures
- Wireless LANs protocols and standards
- Mobile Internet technologies
- Bluetooth networks
- Mobile IP techniques
- Multi-protocol architectures and devices
- Mobility, location and handoff management
- Call admissions control and congestion control
- Mobile quality of service management
- Multimedia QoS and traffic management
- Routing in multi-hop, ad hoc and sensor networks
- QoS routing in wireless networks
- Proxies and middleware for wireless networks
- Performance of E2E protocols over wireless networks

- Wireless multicasting
- Wireless network security and privacy
- Network topology adaptive control
- Flow and congestion control
- Transport protocols for wireless
- Ad hoc wireless networks
- Mobile ad hoc routing
- Wireless multicasting
- Terrestrial-satellite integration scenarios & techniques
- Network resource management
- Wireless switching and routing techniques
- Hybrid wireless communication systems
- Wireless system optimization techniques
- DVB and DAB techniques
- Internetworking heterogeneous networks

#### **Wireless Services and Applications**

- Wireless and mobile networked applications
- Multimedia QoS support and middleware
- Wireless multimedia services and applications
- Wireless service discovery
- Mobile network service generation
- Novel mobile-centric applications
- End-to-end quality of service
- Service portability across homogeneous and heterogeneous networks

- Authentication, authorization and accounting
- Application oriented network management
- Innovative user interface
- Service mobility techniques
- Bluetooth applications
- Wireless application protocol
- Signaling for integrated wire-line/wireless networks

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Abbas Jamalipour

University of Sydney, Australia E-mail: a.jamalipour@ieee.org

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New Jersey Institute of Technology, USA E-mail: Nirwan.Ansari@NJIT.EDU

Mostofa Howlader

University of Tennessee, USA E-mail: howlader@utk.edu

Chengshan Xiao

University of Missouri-Columbia, USA

E-mail: xiaoc@missouri.edu

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