



Third International Symposium on Networking and Wireless Communications

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Symposium Chair

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The scope of the wireless communications technology includes but not limited to two-way radio, cellular communications, personal communications, multi-media communications, antennas, propagation, cognitive radio, dynamic spectrum allocation, and security issues. The author submissions include algorithms, modeling, applications, security issues, and adaptive capabilities to meet the current customer requirements of operating environments, missions and constraints.

The Symposium invites the authors to submit their research articles that explore design, development, applications, and operations of wireless networks. The topics of the tracks include but not limited to:

Dynamic Spectrum Access

Chair: Pao-Ann Hsiung (hpa@computer.org); National Chung Cheng University, Taiwan

- Cognitive radio, ultra-wideband, sensor-based applications
- Cognitive Networks including Cross-Layer Perspective, interference management, Dynamic spectrum Access, scaling laws, Game models, spectrum sharing games, etc.
- Wireless energy and security systems
- OFDM, CDMA, spread spectrum
- Channel modeling and characterization
- Physical layer algorithms
- Applications of Genetic algorithms, neural networks, and game models
- Parallelization of spectrum access
- Environment development and tool usage

Modeling, Algorithms, and Performance Evaluation in Wireless Ad Hoc Networks

Chair: Fangyang Shen (fangyangshen@gmail.com); Northern New Mexico College, USA

- Methods and tools for Ad Hoc Networks
- Performance modeling and analysis in Wireless Ad Hoc Networks
- Routing, broadcasting and multicasting in Ad Hoc Networks
- Energy-efficient protocols for Ad Hoc Networks
- Resource management, quality of service, and routing in Ad Hoc and Sensor Networks
- Fault-tolerance and reliability issues in Ad Hoc and Sensor networks
- Power control and management in Wireless Sensor Networks
- Security in Ad Hoc and Sensor networks
- Scalability issues and time synchronization techniques in Ad Hoc and Sensor Network
- Design issues in sensor networks applications, such as solar sensors, soil moisture sensors
- Sensor Cloud and its integration

Sensor networks and Security

Chair: Damayanti Datta (ddatta@methodist.edu); Methodist University, USA.

- Real-time issues in sensor networks
- Sensor network applications and deployment experiences
- Sensor network protocols and architectures
- Operating systems and middleware for sensor networks
- Distributed sensing and control

- Power management
- Detection, classification, and estimation
- Localization and time synchronization
- Security and privacy

RF-based Localization: Novel system approaches, technologies and algorithms

Chairs: Fahim Gohar Awan (fawan@uet.edu.pk), University of Engineering & Technology, Lahore, Pakistan

- Modeling, Algorithms, and Performance Evaluation
- Wireless Home Communication and Networking
- Measurements and Experimental Research
- Interference Cancellation, Characterization and Avoidance for Cognitive Radio
- Multi-Hop and Cooperative Communications
- OFDM, CDMA, Spread Spectrum
- Space-Time, MIMO, Adaptive Antennas, Network Coding, Cooperative Communications and Other Novel Techniques
- Channel Modeling and Characterization
- Information-Theoretic Aspects of Wireless Communications, Capacity, Throughput, Outage, Coverage
- Ultra-Wide Bandwidth Communication
- Machine Learning, Estimation and Processing Techniques for Wireless Communications
- Mobile and Wireless IP, Congestion and Admission Control

Mobile Ad hoc Networks (MANET) and WiMAX

Chair: Y.B.Reddy (ybreddy@gram.edu)

- Call Admission Control and Traffic Scheduling in WiMAX and MANET
- Quality of Service and Fairness Provisioning in Broadband Wireless Access (BWA) and MANET
- Multimedia over Broadband Wireless Access
- Mesh and Relay Networks in WiMAX
- Cross layer support and Radio Resource Management in BWA and MANET
- MAC protocols in WiMAX and IPv6 compatibility
- MIMO and OFDMA in WiMAX
- Downlink/Uplink Resource Management in BWA
- PMP/Mesh mode in BWA
- IEEE 802.16e, IEEE 802.16d standards
- Bandwidth Allocation Algorithms for BWA
- Next Generation Broadband Wireless Access
- Spatial Reuse and QoS Routing in WiMAX and MANET
- Neural- Genetic algorithms for Scheduling Problems for WiMAX and MANET
- Selfish Misbehaviour in WiMAX and MANET
- Hidden and Exposed Terminal Problems in MANET
- Virtual Administration in MANET
- Fixed and Mobile WiMAX

Software Architecture for wireless communications

Chairs: Sarmistha Neogy (sarmisthaneogy@gmail.com); Jadavpur University; India

- Smart wireless reconfigurable wireless communication devices
- Cognitive Networks
- Protocols design
- Cross-layer design
- Sensor networks and security

Paper Submission:

Papers must be of high quality, unpublished, and currently not accepted or under review by another conference, workshop, or journal. All submissions must include author names and complete mailing addresses (including telephone number, fax number, and the email address). Extra charges will apply if final version of the paper exceeds six pages. The paper must be in the **IEEE format** through <https://www.softconf.com/starts/itng10/>. You can also email your paper to track chairs with

the subject line set as "ITNG 2010".

Evaluation Process:

All papers will be reviewed by at least two independent reviewers. Papers will be evaluated for originality, technical content, language clarity, and significance to the conference. Accepted papers will be included in the conference proceedings. The "[Proceedings to be published by the Conference Publishing Services-CPS](#)"

Important Dates:

Submission Deadline: **November 4, 2011**

Author Notification by: **December 9, 2011**

Advance Registration: **January 20, 2012**

Camera Ready: **February 10, 2012**

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