- In Conjunction with the International Consumer Electronics Show -

7th Annual IEEE Consumer Communications & Networking Conference



January 9 - 12, 2010 • Las Vegas, Nevada USA www.ieee-ccnc.org/2010





PRELIMINARY CALL FOR TECHNICAL SESSION PAPERS

IEEE Consumer Communications and Networking Conference, sponsored by the IEEE Communications Society, is a major annual international conference organized with the objective of bringing together researchers, engineers and practitioners from academia and industry working in all areas of consumer communications and networking.

IEEE CCNC 2010 will present the latest developments and technical solutions in the areas of home networking, consumer networking, enabling technologies (such as middleware), and novel pervasive applications and services. The conference will include a peer-reviewed program of technical sessions, special sessions, short papers, workshops, business application panels/sessions, tutorials, and demonstration sessions.

### Wireless Home Communication and Networking

#### • Wireless Home Networks

- Wireless LANs, WiMax, Cellular Networks UWB and OFDM
- Multi-Channel Communications
- Cross-Layer Design, Interactions and Optimization Seamless Roaming Techniques and Technologies Frequency and Channel Allocation Algorithms
- MAC Protocols
- Modulation, Coding and Diversity
- Physical and MAC Layer Design Issues

# Content Distribution and Peer-to-Peer Networks

- P2P Algorithms and Architectures for Consumer Networking
- Overlay and Application-layer Multicast
- · Peercasting and Overlay Content Distribution
- SIP and P2P SIP
- Novel CE Applications Enabled by P2P Computing
- · Resource and Data Sharing
- Incentive Mechanisms in P2P Networks
- P2P Platforms and Architectures
- · Loss Recovery in P2P and Multimedia Networks

## **6 TECHNICAL TRACKS**

#### Smart Spaces and Personal Area Networks for CE

- Body and Personal Area Networks
- IEEE 802.15 (PAN) and Bluetooth-Based Networks
- · Multi-hop Networks
- Power Control and Conserving Protocols
- Pricing Models
- Service Discovery
- RFID for CE
- Networking with Sensor Devices
- · Service Reliability
- Data Management and Query Processing
- · QoS and Middleware for Smart Spaces and PANs
- Context- and Situation-awareness for Smart Spaces and PANs

#### **Security and Content Protection for CE**

- Wireless Security for Home Environments and CE
   Firewalls and Intrusion Detection
- Firewalls and Intrusion Detection
- Security for Home Networks, PANs and BANs
- Worm and Malware DefensesCombating Phishing and Spam
- Secure Configuration
- Consumer-friendly Security Models and Tools
- Portable Devices Disinfection
- Control of Personal Data
- Reputation and Trust Mechanisms
- Authentication, Authority and Auditing for CE Copyright and Privacy Protection
- Digital Content and Digital Rights Management Streaming and Network Anonymity

# Multimedia Communication and Services

- Multimedia Communication and Streaming
- Multimedia QoS and Protocols
- Distributed Network Protocols for Multimedia
   Image/Video Multimedia Networks for CE
- Streaming Protocols
  High-Definition Audio, Image and Video
- Processing Distributed Coding and Network Coding for Multimedia
- Entertainment Networks
- Multimedia Services
- Multimedia Support over Multi-hop Networks
- Wireless Multimedia
- Field Trials and Measurements

## Pervasive and Ambient Applications

- Pervasive Computing and Contextual Systems
- Wearable Computers
- · Ambient and intelligent applications
- Location-Based Services
- Pervasive Services and Applications for CE
- Smart Devices and Intelligent Environments
- Multi-Modal Interactions and Applications
- Home Automation
- Positioning and Tracking Technologies
- Embedded Platforms
- Personalization
- · Middleware and Multi-Agents Platforms

# **CCNC COMMITTEE**

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Please visit the website www.ieee-ccnc.org/2010 for more information on Tutorials, Special Sessions, Short Papers, Demonstrations, Workshops and Submission Guidelines.

# IMPORTANT DATES

FULL TECHNICAL PAPERS DUE July 7, 2009

ACCEPTANCE NOTIFICATION August 26, 2009

FINAL CAMERA READY ARTWORK September 30, 2009