IEEE Consumer Communications & Networking Conference
(Invited to the International Consumer Electronics Show, January 8-11, 2013)

CALL FOR PAPERS

IEEE Consumer Communications and Networking Conference (CCNC) is a major annual international conference. Taking advantage of its co-location with CES (the world’s largest tradeshow on consumer technology, extensive press coverage and ~150,000 attendees), CCNC is organized with the objective of bringing together researchers, developers, and practitioners from academia and industry working in all areas of consumer communications and networking.

Authors are invited to submit a full paper (two-column, 6-9 pages) according to the guidelines available at http://www.ieee-ccnc.org/. Reviewing will be double blind. The organizers of IEEE CCNC 2013 as well as all our attendees expect accepted papers to be presented at the conference. IEEE reserve the right to exclude a paper from distribution after the conference (e.g., removal from IEEE Xplore) if the paper is not presented at the conferences.

Technical Program Highlights

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All general questions regarding to IEEE CCNC 2013 can be directed to Jin Li (jinl@microsoft.com) directly.

CCNC 2013 features a number of new initiatives to bring together academia and industries. These include:

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Demos (Chance to Show Demos in CES, to ~150,000 visitors) with expanded scopes)

Executive Committee

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| Technical Program Chair | |
### Technical Program Details

#### Mobile Device, Platform and Applications
Chair: Ben Falchuk, ACS/Ericsson
- Mobile platform and mobile applications
- Machine-to-machine (M2M) communications, protocols, applications, test-beds
- Mobile cloud computing / platform issues and techniques
- Performance oriented design and evaluation
- Test-bed implementations and results
- Platform and application trustworthiness
- Mobile operating systems

#### Social Networking & Social Media
Chair: Henry Holtzman, MIT
- Collection and analysis of social networking data
- Collaborative platforms and social recommendation
- New applications and services for social networks
- Social media on connected energy electronics
- Novel connected consumer objects with embedded social networking
- Distributed architectures for social networks.
- Performance and scalability of social networks
- Synchronization of information using social networks
- Identity management and personas

#### Wireless Communications
Chair: Angela Yingjun Zhang, CUHK
Wei Chen, Tsinghua University
David Grace, York University
- Modulation, coding, and diversity techniques
- MIMO and multi-antenna communications
- OFDM and multi-carrier systems
- Wireless air interface and link control
- Signal processing for PHY
- Cross-layer design and PHY based network issues
- Distributed multipoint, relay assisted, and cooperative communications
- Network coding

#### Wireless Networking
Chair: Xi Zhang, Texas A&M University
Wei Yu, Towson University
- Cellular systems, 2G/2.5G/3G/4G and beyond
- WiMAX, LTE, WMAN, and other emerging broadband wireless networks
- Networking issues in WLAN, WPAN, and other home/personal networking technologies
- Hybrid wireless and wired networks
- Satellite wireless networks
- Cooperative and relay wireless networks
- Body-based wireless networks

#### Peer-to-Peer Networking and Cloud-Based Content Distribution
Chair: Kurt Tutschku, Univ. of Vienna
- P2P platforms, algorithms and architectures
- Overlay and application layer multicast
- Peer-to-peer VoIP and video conferencing
- Consumer applications enabled by P2P
- Resource and content sharing and distribution
- Incentive mechanisms in P2P networks
- Reputation and trust mechanisms for P2P networks

#### Multimedia Networking, Services and Applications
Chair: Marie-José Montpetit, MIT
- Compression, processing and rendering
- Streaming protocols and applications
- Quality of Service (QoS) and quality of experience (QoE) measurement and analysis
- Multimedia services and applications over converged networks
- Network coding for caching and dissemination
- Network optimization for multimedia streaming and interactive gaming

#### Smart Spaces and Sensor Networks
Chairs: Damla Turgut, U. of Central Florida
Frederick T. Sheldon, ORNL
- Ad hoc, sensor, and vehicular networks
- Context-and situation-awareness for smart spaces
- Real systems and testbed results for smart spaces
- Smart grid energy infrastructure cyber protection
- Smart grid security risk assessment and management
- Scalable/trusted control systems security
- Security assurance/interoperability for energy delivery systems

#### Security, Content Protection and DRM
Chair: Ton Kalker, Huawei
- DRM technologies and systems
- DRM usability
- Media security
- Hardware and software security
- Robust identification
- Security models & threat analysis
- Privacy and anonymity
- Media usage and business models
- Content protection and social media

#### Vehicular Communications and Networking: V2V, V2I, V2R, and V2U
Chair: David Matolak, Ohio University
- Physical layer: channels and propagation, DSRC/WAVE, enhancements, MIMO, latency
- Networking: IEEE 1609, broadcasting/multicasting/unicasting, ad hoc operation, interference in large aggregations of vehicles, capacity
- Simulations: PHY, MAC, V2V/V2R networking, V2V ad hoc networking, applications
- Operation/deployment: field trials, economic models, infrastructure ownership/operation, penetration

#### Green Communications and Computations
Chairs: Xi Zhang, Texas A&M University
F. Richard Yu, Carleton University
- Energy efficient hardware, software, devices & designs
- Low energy consumption and low GHG emission
- Power and spectrum efficient mobile
- Energy and GHG emission metrics & measurements
- Standards, policy, and regulation
- Security of green communications and computations
- Experimental test-beds and results
- Pricing and billing

#### eHealth, Ambient Assisted Living
Chair: Artur Serrano, NST
Pradeep Ray, U. of New South Wales
- Wearable medical wireless sensors
- Software architectures for ambient assisted living
- Autonomic diagnosis and situation awareness
- Health and wellness measurement and monitoring
- Home based health monitoring and intervention.
- Smart home applications and services
- Security, trust and privacy
- Legal and regulatory issues
- Usability and acceptability

#### Telepresence & Tele-robot
Chairs: Cha Zhang, Microsoft
Ruigang Yang, Univ. of Kentucky
- Display and visualization
- Multimedia processing for telepresence and teleoperation
- Motion tracking
- User interface and interaction techniques
- Haptic techniques
- Psychological studies
- Applications (health, business, education, gaming)

#### Intelligent and Emotion-oriented Computing
Chair: Youngsang Choi, Samsung
- Emotion recognition, processing and expression technology and applications
- Machine learning methods and applications
- Semantics and ontology engineering
- Question and answering technology
- Context-aware systems
- Ubiquitous computing and ambient intelligence

#### 3D Imaging, Processing, Communication and Display
Chairs: Du Sik Park, Samsung
Seungsin Lee, Samsung
- 3D Imaging Systems
- 3D Contents Processing
- 3D Contents Transmission
- 3D Display Systems
- 3D Visual Perception and Quality Assessment
- 3D Contents Security and Digital Right Management
- 3D Contents Interaction
- 3D Services and Applications