



# Don't Miss the 10<sup>th</sup> Annual IEEE Consumer Communications & Networking Conference

January 11-14, 2013 • Las Vegas, Nevada USA

**IEEE Consumer Communications & Networking Conference**  
(Co-located with 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

### Mobile Device, Platform and Applications

Chair: Ben Falchuk, ACS/Ericsson

### Social Networking & Social Media

Chair: Henry Holtzman, MIT

### Wireless Communications

Chairs: Angela Yingjun Zhang, CUHK  
Wei Chen, Tsinghua University  
David Grace, York University

### Wireless Networking

Chair: Xi Zhang, Texas A&M University  
Wei Yu, Towson University

### Peer-to-Peer Networking and Cloud-Based Content Distribution

Chair: Kurt Tutschku, Univ. of Vienna

### Multimedia Networking, Services and

### Applications

Chair: Marie-José Montpetit, MIT

### Smart Spaces and Sensor Networks

Chair: Damla Turgut, U. of Central Florida  
Frederick T. Sheldon, ORNL

### Security, Content Protection and DRM

Chair: Ton Kalker, Huawei

### Vehicular Communications and Networking: V2V, V2I, V2R, and V2U

Chair: David Matolak, Ohio University

### Green Communications and Computations

Chairs: Xi Zhang, Texas A&M University  
F. Richard Yu, Carleton University

### eHealth, Ambient Assisted Living

Chairs: Artur Serrano, NST

Pradeep Ray, U. of New South Wales

### Telepresence & Tele-robot

Chairs: Cha Zhang, Microsoft  
Ruigang Yang, Univ. of Kentucky

### Intelligent and Emotion-oriented Computing

Chair: Youngsang Choi, Samsung

### 3D Imaging, Processing, Communication and Display

Chairs: Du Sik Park, Samsung  
Seungsin Lee, Samsung

## New Initiative Highlights

All general questions regarding to IEEE CCNC 2013 can be directed to Jin Li ([jinli@microsoft.com](mailto:jinli@microsoft.com)) directly.

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

### Grand Challenge

Chair: Cheng Huang, Microsoft

### Industry Session

Chair: Stan Moyer, Inventures

### Paper Award

Chair: Henry Holtzman, MIT  
Demos (Chance to Show Demos in

### CES, to ~150,000 visitors)

Chairs: Frank den Hartog, TNO  
Venkatesha Prasad, U. of New South Wales

### Student Council

Chairs: Yanjiao Chen, HKUST  
Vida Ferdowsi, U. of Missouri, Kansas

### Workshops (with expanded scopes)

Chair: Alexandros G. Dimakis, USC

### Tutorials (Free to all attendees)

Chair: Sudipta Sengupta, Microsoft

### Green Communication and Computation

Chair: Xi Zhang, Texas A&M

## Executive Committee

### General Chair

Eunsoo Shim, Samsung

### Technical Program Chair

Jin Li, Microsoft

### Steering Committee Chair

Rob Fish

## 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 consumer 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

Chairs: 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

Chairs: 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

Technical Paper Due: Aug. 31, 2012  
Notification: Sept. 28, 2012  
Camera Ready: Oct. 15, 2012

Please visit <http://www.ieee-ccnc.org/> for more information on Grand Challenges, Research Papers, Industry Talks, Tutorials, Keynotes, Plenary Talks, Panels, Demos, Workshops and Paper Submission Guideline.