# The 13th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications

## 9-11th October 2017 | Rome, Italy

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The IEEE WiMob conference is an international forum for the exchange of experience and knowledge among researchers and developers concerned with wireless and mobile technology. For eleven years, the International IEEE WiMob conference has provided unique opportunities for researchers to interact, share new results, show live demonstrations, and discuss emerging directions in - Wireless Communication, - Wireless Networking, Mobility and Nomadicity, - Ubiquitous Computing, Services and Applications, -Green and sustainable communications and network computing and - Security on Wireless and mobile Networks.

IEEE WiMob 2017 will take place in Rome, Italy, between October 9 and 11th, 2017.

IEEE WiMob 2017 is soliciting high quality technical papers addressing research challenges in the areas of wireless communications, wireless networking, mobility, nomadicity, ubiquitous computing, services and applications. Papers should present original work validated via analysis, simulation or experimentation. Practical experiences and Testbed trials also are welcome.

IEEE WiMob 2017 will host FIVE parallel symposia, including but not limited to the following topics:

## 1. Wireless Communications

- Broadband Wireless Communication Systems
- Signal Separation and Interference Rejection
- Wireless Personal Communications
- Multimedia Communications over Wireless
- Advances in Satellite Communication
- Signal processing for wireless communication systems
- Adaptive Antennas for Wireless Systems
- Modulation and Coding
- Multiple Access Techniques
- Multiuser Detection
- Femtocells
- Channel Measurement and Characterization
- Location Estimation and Tracking
- OFDM and CDMA Technologies and Systems
- Resource Allocation and Interference Management
- MIMO Channels
- Multirate and Multicarrier Communications
- Link and System Capacity
- Spectrum Usage and Cognitive radio systems
- Cognitive and cooperative MAC
- Heterogeneous cellular networks
- Small cells and multi-tier networks
- Millimeter wave communication systems
- Energy harvesting communication systems
- Large scale Massive MIMO systems

## 2. Wireless Networking, Mobility and Nomadicity (WNMN)

- Mobile IP Networks
- Inter-working of 2G, 3G and 4G Wireless Networks
- Cellular Systems, PCS Modeling and Configuration
- Wireless Sensor Networks
- Cross-layer Design and Optimization
- Cross-layer security
- Congestion and Admission Control
- Mobility patterns, Location and Handoff Management
- Design and Analysis of Wireless LAN/WAN
- Wireless multicasting, broadcasting and geocasting
- Wireless Sensors and Actuators/Robots networks
- Energy-efficient protocols for wireless networks
- Opportunistic networks
- Vehicular wireless networks
- Wireless Mesh networks
- Delay Tolerant Networks
- Integration of ad hoc networks with wireless access networks
- QoS support for mobile networks
- RFID networks and protocols
- B3G/4G Systems, WiMAX, WLAN, WPAN
- Optimization models and algorithms
- Space Networksscale Massive MIMO systems

## 3. Ubiquitous Computing, Services and Applications (UCSA)

- Emerging Wireless/Mobile applications
- System prototypes, real deployments and experimentation
- Cognitive Radio applications and spectrum management
- Resource and service discovery
- Mobile Social Wireless Networks
- Opportunistic Applications
- Gaming Applications in Ubiquitous Computing Environments
- Operating system and middleware support for mobile computing
- Multimedia over Wireless Networks
- Network Coding in wireless networks
- Green computing in wireless networks
- Smart Grid
- Portable Devices and Wearable Computers
- Passive, Active and Smart Tags for Ubiquitous Computing
- Context and Location aware applications
- Data replication and dissemination in mobile networks
- Mobile Urban Sensing and Crowd-sensing
- Data gathering, fusion, and dissemination in WSNs
- Intelligent Transport Systems applications
- Wireless communications to vehicle-to-grid applications
- Wireless telemedicine and e-health services
- Content distribution in wireless home environment
- Service oriented architectures, service portability, P2P
- Smart Cities and smart environment
- Internet of Things wireless networks

## 4. Green and Sustainable Communications and Network computing (GSCN)

- Architectures, algorithms, protocols and scheduling for green communication systems and networks
- Energy-efficient techniques for 5G wireless communication systems
- Green Internet of Things
- Energy harvesting, storage and recycling
- Green data storage, data centers and cloud computing, content distribution networks
- Energy efficiency in big data networking
- Communication networks for the smart grid
- Sensor and actuator networks for the smart grid
- Low cost, energy-efficient antenna and RF designs
- Green network monitoring and measurements
- Green communications under delay or quality of service
- constraints
- Theory, modeling, analysis, and/or optimization for green and sustainable communications and systems
- Self-organizing green wireless networks
- Advanced metering infrastructure and smart meter technologies
- Economy and pricing for green communication and services
- Communication technologies for green buildings
- Energy-efficient smart cities
- Context-based green management & green awareness
- Experimental test-beds and results for green communications
- Green technologies for intelligent transport systems
- Cross-layer design and optimization for green
- communications and networking
- Green optical communications, switching and networking
- Physical layer approaches for green communications
- Green techniques for smart highways and vehicular networks
- Power-efficient cooling and air-conditioning systems for communications and computing
- Optimal use of renewable energy in communication systems and networks
- Signal processing for green communications
- Use of cognitive principles to achieve green objectives
- Sustainable communication platforms
- Standardization, policy and regulation for green communications and computing

## 5. Security on Wireless and mobile Networks (SWMN)

- Computer and Network Forensics
- Cross-layer Design Security
- Cryptographic Algorithms and Applications
- Identity Management, Key distribution and management
- Information System Security
- Intrusion Detection and Prevention
- Mobile and Wireless Network Security
- Mobile and Wireless Networks Security
- Network Security Protocol Design
- Other Topics on Security on Wireless and Mobile Networks
- Physical Layer Security
- Privacy and Security in Clouds and Contents Distribution
- Networks
- Resource Allocation, Incentives, and Game-Theoretic Models
- Security and Privacy in Crowd Sensing and Crowd Sourcing
- Security and Privacy of Big Data
- Security and Privacy of Cloud Services
- Security and Privacy of D2D
- Security and Privacy of Location-based services
- Security and Privacy of Social Networks
- Security in Cognitive Radio Networks and Cooperative Communication Systems
- Security of Cyber Physical Systems
- Security of Femtocells and Macrocells
- Security of Mobile Multimedia and Cloud Media
- Security, Privacy and Anonymity in Mesh, Vehicular and Mobile Networks
- Security, Trust and Privacy of Internet of Things
- Smart Grids security
- Smart Phone Security and Privacy
- Threat and Vulnerability Analysis for Mobile Communication
- Trust Models, Security Modeling and Protocol Design
- Trust, Privacy and Security: Application, Network and MAC layers.

## IMPORTANT DATES

Paper Submission Deadline: May 20, 2017          Notification of Acceptance: July 31, 2017          Camera Ready: September 1, 2017

## INSTRUCTIONS FOR PAPER SUBMISSION

Authors are required to submit fully formatted, original papers (PDF), with graphs, images, and other special areas arranged as intended for the final publication. Papers should be written in English conforming to the IEEE standard conference format (8.5" x 11" - US letter, Two-Column). The initial submission for review will be limited to 8 pages. The final manuscript for publication will be limited to 8 IEEE pages. Additional charges may apply for additional pages.

Conference content will be submitted for inclusion into IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. Each accepted paper must be presented at the conference by one of the co-authors or a third party, otherwise it will not be indexed and archived through IEEE Xplore.

Only timely submissions through EDAS at https://edas.info will be accepted. For more details, please visit the WiMob'2017 official website (http://conferences.computer.org/wimob2017) and Facebook page for MoWNet 2017: https://www.facebook.com/WiMob.2017