

The 8th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications

Barcelona, Spain, October 8-10, 2012



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CALL FOR PAPERS

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 seven 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 Communications, Mobile Networking and Ubiquitous Computing.

IEEE WiMob 2012 will be held at Casa Convalescència, Barcelona, Spain. The conference will be hosted by Universitat Politècnica de Catalunya (UPC). Barcelona is one of the most touristic towns in Europe and capital of the Modernism. In fact, Casa Convalescència building is one of the great works of Catalan Modernism, and was declared Historical Artistic Monument in 1978 and World Cultural Heritage Site by UNESCO in 1997.

IEEE WiMob 2012 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 2012 will host three parallel symposiums, including but not limited to the following topics:

1. Wireless Communications

| | |
|--|---|
| Broadband Wireless Communication Systems | Channel Measurement and Characterization |
| Signal Separation and Interference Rejection | Location Estimation and Tracking |
| Wireless Personal Communications | OFDM and CDMA Technologies and Systems |
| Multimedia Communications over Wireless | Resource Allocation and Interference Management |
| Advances in Satellite Communication | MIMO Channels |
| DSP Applications to Wireless Systems | Multirate and Multicarrier Communications |
| Adaptive Antennas for Wireless Systems | Link and System Capacity |
| Modulation and Coding | Spectrum Usage and Cognitive radio systems |
| Multiple Access Techniques | Cognitive and cooperative MAC |
| Multiuser Detection | |

2. Wireless Networking, Mobility and Nomadicity

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|---|--|
| Mobile IP Networks | Energy-efficient protocols for wireless networks |
| Inter-working of 2G, 3G and 4G Wireless Networks | Green wireless network architectures and communication protocols |
| Security, Privacy and Authentication in Mobile Environments | Opportunistic networks |
| Cellular Systems, PCS Modeling and Configuration | Vehicular wireless networks |
| Wireless Sensor Networks | Wireless Mesh networks |
| Cross-layer Design and Optimization | Delay Tolerant Networks |
| Cross-layer security | Integration of ad hoc networks with wireless access networks |
| Congestion and Admission Control | QoS support for mobile networks |
| Mobility patterns, Location and Handoff Management | RFID networks and protocols |
| Design and Analysis of Wireless LAN/WAN | B3G/4G Systems, WiMAX, WLAN, WPAN |
| Wireless multicasting, broadcasting and geocasting | Optimization models and algorithms |

3. Ubiquitous Computing, Services and Applications

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

All accepted papers will be published in the conference proceedings and by the IEEE, and will be accessible via **IEEE Xplore Digital Library**. Authors are required to submit fully formatted 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 final manuscript for publication will be limited to 8 IEEE pages.

WiMob 2012 is using the **EDAS Conference Management System** to manage the paper submission process.

IMPORTANT DATES

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|------------------------------------|------------------------------|
| Papers due: | May 16, 2012 |
| Notification of acceptance: | July 1, 2012 |
| Camera ready paper due: | July 20, 2012 |
| Advance registration: | September 08-10, 2012 |

More instructions are available at the web page: <http://conferences.computer.org/wimob2012/index.html>