WONS 2016

12th Annual Conference on Wireless On-demand Network Systems and Services

20-22 January 2016   ·   Cortina d'Ampezzo, Italy

http://2016.wons-conference.org/

Wireless on-demand network systems and services have become pivotal in shaping our future networked world. Starting as a niche application over Wi-Fi, they can now be found in mainstream technologies like Bluetooth LE, LTE Direct and Wireless LANs, and have become the cornerstone of upcoming networking paradigms including mesh and sensor networks, cloud networks, vehicular networks, disruption tolerant and opportunistic networks, and in-body networks.

The challenges of this exciting research field are numerous. Examples include how to make smart use of these novel technologies when multiple technologies or a mix of permanent services and on-demand networking opportunities are available to a network node, how to provide robust services in highly dynamic environments, how to efficiently employ and operate heavily resource-constrained devices, and how to develop robust and lightweight algorithms for self-organization and adaptation.

WONS, now numbering twelve editions, has established itself as a high quality forum to address these and related challenges. After a one-year break, WONS is able to continue to provide a global platform for rich interactions between experts in their fields, discussing innovative contributions in a stimulating environment.

This announcement solicits original contributions of high-quality research providing novel insights on all aspects of wireless on-demand networks and systems; from protocol and network design, modeling, performance evaluation, profitability models, energy efficiency, QoS models and mechanisms, practical implementations, service level aspects, application use-cases, to the integration of multiple wireless network technologies.

Topics of interest comprise, but are not limited to:

- Cognitive radio networks
- Cross-layer design
- Energy-efficient protocols and power management
- Heterogeneous wireless networks
- Implementations and testbeds
- Integration and co-existence of heterogeneous technologies
- Intra-body and biomedical on-demand systems
- Green wireless networks
- Localization and mobility management
- MAC and advanced PHY technologies
- Middleware aspects

- Mobile peer-to-peer systems
- Mobile computing and services
- Modeling and optimization
- Network management
- New architectures for on-demand wireless systems
- Novel applications and services
- Opportunistic, delay-tolerant, and dissemination-based protocols
- Performance evaluation through simulations and experiments
- Pervasive and ubiquitous computing
- Security, privacy, and trust
- Social and economic aspects

Special Track:

WONS 2016 also solicits original contributions to a special track on Community Networks and Services.

Community Networks are bottom-up initiatives that mix wireless mesh networks with wired networks to provide Internet connectivity but also to enable the on-demand creation of local applications. Contributions are welcomed on the related technical open issues (routing protocols, distributed applications, wireless-wired interaction etc.), social challenges (legal organization and hurdles, instruments to manage community networks, privacy issues etc.) and on hands-on experience on the realization and maintenance of networks.

Manuscript submissions:

Authors are invited to submit double-column **long papers (up to 8 pages) and short papers (up to 4 pages)** as a PDF file in IEEE format with a font size no smaller than 10pt. All submitted manuscripts must be at least 3 pages in length. Short papers should present future research directions and ongoing work with visionary, innovative ideas; accepted short papers will populate poster sessions at the conference and will be included in the conference proceedings. Submitted papers must not have been published elsewhere and must not be currently under review by another conference or journal. Submission implies the willingness of at least one of the authors to register and present the paper.

Further submission instructions are published on the conference web site
http://2016.wons-conference.org/

General Chair:

Renato Lo Cigno
University of Trento

TPC Chairs:

Christoph Sommer
University of Paderborn

Konstantinos Psounis
Univ. Southern California

Special Track on Community Networks and Services:

Leonardo Maccari
University of Trento

Web and Publicity Chair:

Michele Segata
University of Trento
University of Innsbruck

Steering Committee:

Renato Lo Cigno
University of Trento

Falko Dressler
University of Innsbruck

Mario Gerla
UCLA

Edward W. Knightly
Rice University

Ioannis Stavrakakis
University of Athens

Important Dates:
18 September 2015:
Paper registration deadline

25 September 2015:
Paper submission deadline

20 November 2015:
Author notifications sent

4 December 2015:
Camera ready versions due