

IEEE/IFIP WONS 2021

16th Annual Conference on Wireless On-demand Network Systems and Services

9-11 March 2021, Virtual Conference

<http://2021.wons-conference.org/>

Authors registration fee: 180€ - PhD students registration fee (non authors): free

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. Finally, there are many application-specific challenges.

WONS, now in its sixteenth edition, is a high quality forum to address these challenges. WONS aims 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, 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
- Vehicular networks

- Network management
- Modeling and optimization
- Mobile computing and services
- 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
- Underwater on-demand networked systems
- Architectures and protocols for the Internet of Things
- Device-to-device communication for 5G and 6G architectures

This edition will additionally include a special session titled "Smartphone Apps for Contact Tracing - Experiences with COVID-19 Tracing Apps", addressing the issues related to pandemic control and tracing.

This edition of WONS will be held virtually. This decision have been taken by the organizing committee after having carefully monitored the sanitary evolution. This will allow all speakers and participants to join the conference independently of any travel restrictions that might still apply beginning of 2021. The virtual format of the conference enables the organization committee, in agreement with IFIP and IEEE, to offer the registration for a very low fee. The registration for non-authors PhD students will be free, giving the opportunity to meet on-line all the authors and the Keynote Speakers. The limited size of this long-run, prestigious conference enables the on-line event to be organised with a non-conventional, impactful format. It is thus a unique opportunity to join and contribute to fruitful discussions in this period of limited travel and continuous restrictions.

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Important Dates

Paper Submission: *Dec. 18th, 2020*

Acceptance Notification: *Jan. 29th, 2021*