VTC2018-Spring Workshop Call For Paper

Title: 5G for a Variety of Services

Scope:

5G wireless is fundamentally transforming radio network from pure wireless connectivity to a network for services. Mobile wireless access technologies have gone through several generations of evolutions and access spectral efficiency is approaching Shannon capacity. However, there are enormous opportunities on support of various services. 5G wireless will enable new services and applications, in particular, enhanced mobile broadband (eMBB), massive machine-type communications (mMTC) and ultra-reliable low-latency communications (URLLC). Network slicing and machine learning are going to be part of radio network architecture as well. The goal of the workshop is to bring together researchers from industry and academia, cellular service providers, and industrial partners to explore various ways for 5G to more efficiently support a variety of services. The focus of the workshop will be on the evolution of cellular network to efficiently support varieties of services, related to end-to-end network architecture and requirements, cloud technology including end-to-end network slicing, use cases, field experiments, and performance results. The workshop will offer keynote speeches by prominent figures from industry and research sides, as well as technical presentations on the latest research and development in 5G for services, including deployment related results using real-world examples and scenarios.

Topics:

Topics of interest cover 5G for services emerging trends, architecture and requirements, use cases, enabling technologies, and performance results. The workshop solicits technical papers on the following (but not limited to) topics:

- 5G service architecture and requirements, emerging trends, applications and use cases
- Enabling technologies for 5G cloud including network slicing and differentiations
- Capacity, coverage and performance improvement for 5G services
- 5G field performance and experimental results associated with varieties of services
- 5G deployment scenarios and interworking with existing 2G/3G/4G cellular networks
- 5G network deployment research and analysis
- Recent advances in 3GPP standardization on 5G New Radio (NR) and evolved LTE
- eMBB and multicast/broadcast in 5G NR and evolved LTE
- mMTC/IoT communications in 5G NR and evolved LTE
- URLLC Communications in 5G NR and evolved LTE
- Voice support over 5G NR and Evolved LTE
- Video and Video Telephony support over 5G NR and Evolved LTE
- V2V and V2X communications
- Energy harvesting and green communications for 5G services
- Physical layer improvement on 5G for varieties of services
- MAC layer improvement on 5G for varieties of services
- Traffic models for various 5G innovative services
- Radio access technologies and protocols to support 5G services

- Automation, Management and Orchestration for 5G Services
- Machine Learning to improve network efficiency and automation

Workshop organizers:

- Dr. Jin Yang, Fellow, Verizon Communications, jin.yang@verizon.com
- Dr. Amitava Ghosh, IEEE Fellow, Fellow at Nokia Bell Labs, amitava.ghosh@nokia-bell-labs.com
- Dr. Tong Wen, IEEE Fellow, Fellow at Huawei, tongwen@huawei.com
- Prof. Rose Qingyang Hu, Professor, Utah State University, rose.hu@usu.edu

Submission guidance and schedule:

The workshop will take place on Sunday, June 03, 2018 at Porto, Portugal. The maximum full paper length for a Workshop paper is 5 pages; an author can purchase up to two additional pages for a maximum allowed length of 7 pages. Technical papers/posters will comprise of peer-reviewed and a few invited papers. Submitted papers and posters will be peer reviewed by at least 3 reviewers, with acceptance rate in line with guidance from VTC2018-Spring technical committee.

Submission deadline: January 19, 2018
Acceptance notification: February 12, 2018
Final paper due: February 28, 2018