





CALL FOR ARTICLES

IEEE Vehicular Technology Magazine IEEE 5G Initiatives Special Issue on 5G Technologies and Applications



The fifth-generation (5G) networks continue to emerge through evolved technologies that support massive users connectivity and multigigabits downloading speeds. The 5G is a service-based network that requires efficient selection of sliced architectures considering connected end-user and requested standard slice type. The key advances over previous generations include spectrum extensions using new radio (NR) technologies, multi-interface access, orchestrated operations driven by network function virtualization (NFV) and softwaredefined networking (SDN), etc.

Those technical evolutions will improve the resource availability and system scalability in response to dynamic changes in traffic. Considering a technology road-map for development, IEEE 5G Initiative is sponsoring this series of special issues to publish new papers on the state-of-the-art research material that covey new concepts and results in tutorial style. The selected papers will mark the millstones for 5G findings and trails in view of end-to-end system features. Authors are invited to submit original manuscripts on topics including, but not limited to:

Physical layer developments in 5G

Resource allocations for ultra-dense networks

Interoperability between licensed and unlicensed bands

Dense small cell deployments for edge device connectivity

Time alignment for dual- and multi-transmission

Millimeter wave band and massive MIMO

Network slicing and topology managements

Service type analysis: uRLLC, eMBB, mIoT

C-RAN and network function virtualization

5G core network and service -based architecture

Network hierarchy and mobile edge computing

Software defined networking

Distributed mobility management and network intelligence

Network stability, control and optimization

Integration of various services and tools

Data centers and load provisioning

Vertical application of 5G: smart grid, V2X, etc.

Performance evaluation of testbeds and trials

Internet of Things (IoT) and support for massive connectivity

Innovative applications and services facilities by 5G

Visions for Beyond 5G technologies

Standardization activities by IEEE, 3GPP and ETSI

Authors should submit their manuscripts following the IEEE VTM guidelines at http://www.ieeevtc.org/vtmagazine/submission.php

Authors should submit a PDF version of their complete manuscripts to http://mc.manuscriptcentral.com/vtm-ieee

Important Dates

Submission Deadline: 15 October 2018 First Revisions/Reject Notice: 15 December 2018 Acceptance Notice: 15 February 2018 Final Manuscript Due: 1 March 2019

Publication: June 2019

Guest Editors

Anwer Al-Dulaimi (anwer.al-dulaimi@exfo.com) EXFO, Canada Rose Hu (rose.hu@usu.edu)

Utah State University, USA