



## CALL FOR ARTICLES

IEEE Vehicular Technology Magazine

### IEEE Future Networks Initiative, Sixth Special Issue on 5G Technologies and Applications

2020 marks the starting year for fifth-generation (5G) network deployment. However, it's still a long way before we have a fully operational network that meets the predefined KPIs for sliced services and multigigabits downloading speeds. Also, the mechanisms for the efficient selection of service-based architectures have not yet evolved to adopt the new concepts of logic networking and dynamic network slicing. There is also a need to continue developing spectrum extensions techniques for new radio (NR), multi-connectivity schemes, orchestrated operations driven by network function virtualization (NFV) and software-defined networking (SDN), etc.

In considering a technology road-map for development, IEEE Future Networks is sponsoring this series of special issues to publish new papers on state-of-the-art research that convey new concepts and results in a tutorial style. Selected papers will mark milestones in 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, mMTC
- 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



Manuscripts should follow the IEEE VTM guidelines at <http://www.ieeevtc.org/vtmagazine/submission.php>

Submit PDF version of complete manuscripts to <http://mc.manuscriptcentral.com/vtm-ieee>

#### Important Dates

Initial Submissions by:	<b>1 September 2019</b>
First Round Reviews by:	<b>2 December 2019</b>
Second Round Submissions by:	<b>15 January 2020</b>
Second Round Reviews by:	<b>28 February 2020</b>
Publication:	<b>June 2020</b>

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