IEEE Wireless Communications and Networking Conference

6-9 April 2020 // Seoul, South Korea
Beyond Connectivity: What Comes After 5G
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WORKSHOP ON THE ORCHESTRATION OF 5G-AND-BEYOND NETWORKS USING MACHINE LEARNING (O5ML 2020)

https://ims.iiitnr.edu.in/WCNC/Home.aspx

Rapid progress of Internet of Things (IoT) increases the data traffic manifold, which also increases by the requirements of next generation users. Recent analysis predicts IoT technology market will be worth 883.55 Billion USD by 2022 and it is also predicted that mobile data traffic will grow more than 1000 times compared with the end of 2010 beyond 2020. In order to support high QoS requirements, ITU proposed IMT-2020, which is setting the stage for 5G wireless technologies with broadband data rate more than 5 Gbps, latency less than 1 ms even for high mobile user. To support these, 5G network proposed several techniques such as 5G NR, 3D beamforming, beam steering, mmWave etc which are complex in nature. Presence of dense network make to design channel modelling is very challenging. Channel models are important because wireless PHYs must encode, transmit, receive, and decode data in such a way that bit-error-rates (BERs) stay acceptably low. Artificial intelligence (AI), in the form of machine learning (ML), is becoming a tool for characterizing wireless channels in the digital domain in communication and networking purpose.

Scope and topics of the workshop

This workshop aims at providing a snapshot of the status and progress of the recent developments in wireless and optical networks towards a converged future network. The workshop will cover key topics related to 5G-and-beyond networks, including, but not limited to, the

- **Convergence of optical & wireless network**
- **Optical network**
- **Deep learning in wireless network and optical network**
- **NFV/SDN implementation**
- **Software-defined network**
- **5G and beyond**
- **Evaluation of the performance of 5G NR implementations**
- **Interoperability of wireless and optical network**
- **Performance test of 5G key enabling technologies, e.g., massive MIMO, multi-connectivity, mmWave**
- **Network slicing**
- **5G network planning**
- **Network eployment optimization.**
- **Cognitive optical network**
- **Machine learning in convergence**
- **Core network**
- **Multi-access edge computing**
- **Network big data**
- **Blockchain in future networks**

Submission Deadline: December 31, 2019
Acceptance Notification: January 31, 2020
Camera-Ready Paper: February 15, 2020

Submit Paper in

https://edas.info/newPaper.php?c=26944

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