IEEE International Workshop on
Ultra-high speed, Low latency and Massive Communication for futuristic 6G Networks (ULMC6GN)
June 14–18, 2021
Montreal, Canada

IEEE ICC®

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Important Dates

❖ Paper submission deadline:
 January 20, 2021
❖ Notification of acceptance: February 20, 2021
❖ Camera-ready papers: March 1, 2021

Submission link

https://edas.info/N27513

Webpage link

https://harispervez7.wixsite.com/icc21-ws-ulmc6gn

Scope

Today's wireless services and systems have come a long way since the rollout of the conventional voice-centric cellular systems. The demand for wireless access in voice and multimedia applications has increased tremendously. In addition to these, new application classes, such as enhanced mobile broadband (eMBB) communication, ultra-reliable and low latency communications (uRLLC), massive machine type communications (mMTC), and the Internet of Things (IoT), have gained significant interest recently for 5G wireless networks. In order to address these technical challenges, 5G waveforms and radio access technologies (RATs) should be much more flexible. In the enhanced Mobile Broadband scenario, the user experienced data rate (from 100 Mbit/s, in urban and sub-urban areas, to 1 Gbit/s, in indoor cases) – defined as achievable data rate that is available ubiquitously across the related considered target coverage area to a mobile user/device – has the highest importance, especially in hotspots.

The goal of the workshop is to solicit the recent developments in ultra-high speed, low latency, and massive connectivity communication with a vision of their potential advancement into beyond 5G and towards 6G. We aim to organize the 4th Workshop on "Ultra-high speed, Low latency and Massive Communication for futuristic 6G Networks (ULMC6GN)" in ICC 2021 to bring together academic researchers, industrial practitioners, and individuals working on this emerging exciting research areas to share their new ideas, latest findings, identify and discuss potential use cases, open research problems, technical challenges, and solution methods in this context.

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Federated Machine learning for 6G wireless networks
- Multi-agent Reinforcement learning for 6G wireless networks
- Integrated Aerial/Terrestrial Networks
- Connected and Autonomous Aerial Networks
- AI & Data Analytics in Intelligent, Adaptive, and Efficient Networks of 2030s
- Ubiquitous 3D Super-Connectivity for networks of 2030s
- Predictive Resource Allocation and Scheduling for 6G
- Novel and Innovative NOMA solutions for 6G
- Cross-Layer design and performance analysis for low latency applications
- Spectrum aspects of URLLC – carrier frequency and spectrum requirements
- Network slicing and network functions virtualization – with focus on low latency
- RAN concepts in the context of latency- or reliability-critical applications,
- Architectural enablers for distributed or edge computing,
- Emerging cellular architectures for distributed and flexible network functions in 5G/B5G
- Network/Resource slicing and network functions virtualization with focus on low latency
- Advanced radio resource management techniques for URLLC
- Low latency industrial control systems
- Joint Control and Communication management for 5G use cases such as V2V, V2X and V2I

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of six (6) printed pages (10-point font) including figures. No more than one (1) additional printed page (10-point font) may be included in final submissions and the extra page (the 7th page) will incur an over length page charge of USD100. For more information, please see IEEE ICC 2021 official website: https://icc2021.ieee-icc.org/authors