

WORKSHOP IVR5G+: INTERCONNECTED VIRTUAL REALITY IN 5G AND BEYOND



International Workshop on Interconnected Virtual Reality in 5G and Beyond (IVR5G+)

(in conjunction with IEEE Global Communication Conference (GLOBECOM) 2017, Singapore)

Just recently, the concept of augmented and virtual reality (AR/VR) over wireless has spurred an unprecedented interest from academia and industry. Yet, the success of an immersive VR experience hinges on solving a plethora of grand theoretical and practical challenges cutting across multiple disciplines.

This workshop underscores the importance of wireless VR technology as a disruptive use case of 5G (and beyond) harnessing the latest development in storage/memory, fog/edge computing, computer vision, artificial intelligence and others. In this regard, main requirements of wireless interconnected VR are yet to be addressed and key enablers require further investigations. With multiple research avenues and their underlying grand challenges, this workshop focuses on the limitations of current networks and lays down theoretical and practical solutions to spearhead the fruition of wireless VR.

We invite paper submissions to this workshop including, but not limited to the topics listed below. Contributions that address the integration of multiple technologies are particularly encouraged.

- “Shannon-like” Theories and Mathematical Foundations
- Novel Immersive Applications, Software Architectures, and Systems Design
- Caching/Storage/Memory Techniques for AR/VR
- Local/Fog/Edge/Cloud Computing Methods for AR/VR
- Short-Range, Cellular and Quantum Communication Methods for AR/VR
- Computer Vision and Media Applications for AR/VR
- Low-latency and ultra-reliability for AR/VR
- Image processing and coding for VR video
- Context-information and Analytics for AR/VR
- User Behavioural Data and Social AR/VR
- Security and Privacy Concerns in AR/VR Systems
- Green AR/VR
- Large Scale Collective and Interconnected VR
- Localization and Tracking Methods for AR/VR
- Prototype and Test-bed for Innovative Wireless AR/VR Methods
- Real-time video streaming or AR/VR
- Latency and bandwidth requirements for AR/VR

Important Dates:

Paper Submission: **1 July 2017**
Notification Date: **1 September 2017**
Final Paper: **1 October 2017**

EDAS Submission Link:

<http://edas.info/newPaper.php?c=23469&track=85956>



**For more information about
IVR5G+ at IEEE GLOBECOM
2017, please visit
<http://laneas.com/events/ivr5g>**

Organizing Committee:

Advisory Committee:

Mérouane Debbah (Huawei/CentraleSupélec, France),
Muriel Médard (MIT, USA)

Workshop Chairs:

Mehdi Bennis (University of Oulu, Finland)
Stefan Valentin (Huawei Technologies, France)
Florian Wamser (University of Würzburg, Germany)

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