

IEEE International Workshop on Immersive & Interactive Multimedia Communications over the Future Internet

Organized in conjunction with
IEEE International Communications Conference (ICC 2013)
9-13 June 2013, Budapest, Hungary

This workshop targets novel issues in immersive media networking where IP offers flexibility in designing novel optimal communication systems for various multimedia data representations and encoding schemes. Transmission and adaptation of coded media to cope with heterogeneous communication networks, diverse terminal equipment and user interaction is an open topic where sound contributions are expected. The workshop will include both service personalisation and QoS/QoE (Quality of Service/Quality of Experience) assurance by seeking for efficient solutions in the fields of : i) server-side adaptation, for optimisation of one-to-many single-stream media content, such as multicast streaming; ii) In-network adaptation, where multimedia streams, especially 3D streams, are processed by the network elements themselves, an approach that is best suited for multicast traffic, where different delivery paths may have different capacities; and iii) Client-side adaptation, in the case where dissimilar media streams are to be re-transmitted or re-distributed in a local manner (e.g., within a home network).

Novel QoE-aware networking frameworks are also addressed, where innovative adaptation and congestion control mechanisms are devised to optimise multimedia delivery over future media networks across heterogeneous and diverse environments. Since QoE is not only influenced by dynamic networking conditions, but also by the quality and perceptual relevance of each element of the coded source stream (e.g., stereoscopic view, audio channel), cross-layer methods shall be devised in order to make QoE metrics available to network control and adaptation mechanisms. The workshop will consider the ecosystem for the delivery of Media Content across ubiquitous networking environments. This includes heterogeneous wireless networks (e.g. WLAN, WiMAX, LTE, 4G), Broadcasting (e.g. DVB), IP-based networks (e.g. information centric networks, P2P) as well as Future Internet Media architectures.

Topics of interest

The workshop will bring together researchers from academia and industry, to identify and discuss technical challenges, exchange novel ideas, explore enabling technologies, and report latest research efforts that cover a variety of topics including, but not limited to:

- Future Media Internet architectures
- Information Centric Networks for Immersive Media
- QoE modeling, evaluation, monitoring and control
- Scalable multimedia coding
- Multiple multimedia descriptions for wireless communications
- Surrounding, immersive and interactive multimedia environments
- Community-focused interactive media systems
- Scalable video coding for wireless communication channels
- Transcoding for heterogeneous wireless channels interoperability
- Mobile multimedia multicast

Submission Procedure

Submitted papers must represent original material which is not currently under review in any other conference or journal and has not been previously published. Paper length should not exceed five-pages standard IEEE conference two-column format (including all text, figures, and references).

Workshop Co-Chairs:

Pedro Assuncao, Instituto de Telecomunicações, Portugal

Luigi Atzori, University of Cagliari, Italy

Tasos Dagiuklas, TEI of Mesolonghi, Greece

Ahmet Kondozi, University of Surrey, UK

Important Dates

Registration of abstract: **January 4, 2013**

Manuscript submission: **January 11, 2013**

Acceptance Notification: **February 2, 2013**

Camera-ready: **March 8, 2013**

<http://multicomm.diee.unica.it>