

Call for Papers
Special Issue of IEEE Transactions on Multimedia
“Cloud-based Video Processing and Content Sharing”

With the rapid growth of IPTV and mobile video applications and driven by urgent demands from industry and users, the technologies of video processing and content sharing have received significant research attention in recent years. Video streaming in novel formats, such as ultra-high definition (UHD) and 3D, gives users an extra dimension of visual sense that greatly improves the liveliness and joyfulness of user experience. However, it also raises new challenges in video processing, coding, presentation and communication as well as in achieving satisfactory Quality of Experience (QoE) performance, especially when media devices (e.g., mobile clients) are resource (i.e., bandwidth, power, and computation) constrained. This calls for alternative solutions for sharing video contents effectively among end users. A media cloud computing system that performs multimedia processing and storage, and provides heterogeneous multimedia services is a natural solution to meet the call and also to remedy the lack of local resources in mobile clients. Cloud-based video processing and content sharing networks are promising technologies to orchestrate the video distribution between the mobile clients and the media cloud system. The objective of this special issue is to identify and promote the necessary enabling media cloud based video processing and content sharing technologies for future anywhere and anytime video streaming applications. The topics of interest include, but are not limited to:

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| <ul style="list-style-type: none">▪ Video processing and communications for media cloud▪ Cloud-based video content sharing networks▪ Network coding for UHD and 3D video content dissemination via cloud▪ Resource balance between media cloud and mobile clients▪ Multimedia social networks for video distribution over cloud▪ Cloud based video presentation for mobile clients▪ Media cloud resource management▪ Cloud-assisted media content recommendation▪ User-centric media adaptation in the cloud▪ Video content sharing via media cloud | <ul style="list-style-type: none">▪ Media cloud and future Internet▪ Cloud-based video system and applications▪ Optimization (e.g., energy, monetary cost)▪ Video editing/authoring on mobile devices with cloud support▪ Security and privacy▪ Social networks and media cloud▪ Cloud-enabled media content search system▪ Cloud-based mobile audio/video streaming techniques▪ Mobility management for cloud based video content sharing |
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Paper Submission

Only original and unpublished research papers will be considered in this special issue. Authors should follow the *IEEE Transaction on Multimedia* manuscript format described in the Information for Authors at <http://www.signalprocessingsociety.org/tmm/>. Prospective authors should submit an electronic copy to the *IEEE Transactions on Multimedia* online manuscript system via <http://mc.manuscriptcentral.com/tmm-ieee> according to the following timetable:

Submissions due: **September 15, 2015**
Revision due: December 15, 2015
Final manuscript due: February 15, 2016

First-round review completed: November 15, 2015
Second-round review completed: January 15, 2016
Publication date: May, 2016

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