Special Issue for IEEE Transactions on Multimedia

Video over Future Networks: Emerging Technologies, Infrastructures, and Applications

The current Internet faces numerous challenges as a platform for media delivery: the high bandwidth demand is fueled by online video streaming services and the advent of ultra-high-definition (UHD) video; widespread use of social media fosters instant sharing of user-generated video; rising consumer interests in augmented and/or virtual reality (AR/VR) underscore the need to support richer media forms with lower latency. In the meantime, design and experimentation of the Internet itself is evolving at its own pace, as demonstrated by recent advances in software-defined networking (SDN), network function virtualization (NFV) technologies, and information-centric networking (ICN) --- technologies with potentially far-reaching impacts on the future Internet. This special issue aims to highlight research works that investigate future Internet technologies through the prism of its most prevalent application: video distribution. Intriguing research questions abound: how can named-data-networking (NDN) support live video streaming? What is the most efficient distribution mechanism for social sharing of user-generated video? What are proper performance metrics for novel networked multimedia applications based on augmented/virtual reality?

We invite submissions of high-quality papers on either original research or survey/overview, which have not been published previously. Topics of interest include, but are not limited to:

- Dynamic resource provisioning for video distribution over SDN-enabled networks
- Network-assisted rate adaptation in SDN-enabled networks
- In-network caching and caching for mobile video delivery
- Video distribution over information-centric networking (NDN) architectures
- Cost and economic models for video distribution over future networks
- Network support for emerging novel applications, e.g., based on augmented reality (AR)
- Networking and distributed systems for augmented reality (AR)
- Distribution of ultra-high-definition (UHD) video over next-generation networks
- Distribution of user-generated media content over future Internet
- Network and cloud support for real-time video analytics
- Integration of video distribution and multimedia computing

Prospective authors should submit an electronic copy of their complete manuscript to http://mc.manuscriptcentral.com/tmm-ieee. Authors are encouraged to contact guest editors for the appropriateness of their topics. Please indicate in the cover letter that the manuscript is intended for the special issue on "*Video over Future Networks: Emerging Technologies, Infrastructures, and Applications*".

Important Dates

Manuscript Due:	**extended! Feb. 10, 2017**	**Final Decisions:**	**June 1, 2017**
First Round of Reviews:	**March 15, 2017**	**Final Paper Due:**	**July 1, 2017**
Revision Due:	**May 1, 2017**	**Publication Date:**	**September 15, 2017**

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