Call for Papers IEEE Transactions on Broadcasting

Special Issue on Quality of Experience for Advanced Broadcast Services

With the catching on of second-screen adoption and the increase of real-time news consumption via social channels, the broadcast landscape underwent a major transformation in the last years: viewers have begun to demand highly customized experiences that meet their individual needs. Beside traditional Terrestrial/SAT/Cable broadcast, global service providers have begun to offer fixed/mobile advanced media delivery on the customer premise, enabling consumers to enjoy the emergence of new services offered by IPTV, 3DTV, SU-U-HDTV advancements in cloud services, and over-the-top (OTT) content providers. Moreover, new technologies such as multi sensorial media, augmented reality, holographic screens and the proliferation of connected devices through the Internet of Things (IoT), could create an immersive environment that will enrich a rapidly growing array of customer experiences and become the next frontier of advanced broadcast services. To this end, there is a need to evaluate the level of enhancement of these experiences and to compare their functionalities and requirements so operators can properly design their networks and regulators can assess the services offered to the audience. The present special issue seeks for original high quality papers on Quality of Experience (QoE) for advanced broadcast services. Topics of interest include, but are not limited to:

- QoE for Emerging Technologies: multi sensorial media; Hi-Fi/spatial/3D audio quality; stereo/multi-view video quality; high resolution/dynamic-range/frame-rate imaging; light-field imaging; holographic imaging; quality in immersive environments (virtual/augmented/ mixed realities); IoT and Emotional TV.
- QoE for Mobile Broadcasting: quality evaluation for mobile devices; adaptive media streaming; impact of viewing conditions, context and device properties, user behaviour.
- QoE for Web and Social Media Broadcasting.
- Big data QoE analytics: Media streaming platforms, crowdsourcing studies.
- QoE-based network and service management: KPI and KQI definition for QoE optimization in emerging environments; control, monitoring and management strategies; inter-operator QoE-oriented collaborations.
- QoE-driven processing, compression and transmission technology.
- QoE Fundamentals: Understanding experience and quality formation; quality vs. user satisfaction vs. acceptance; long-term quality measurement; physiological QoE assessment.
- Reproducible QoE Research: Benchmarking and certification; automation tools for subjective quality assessment; multimedia quality databases; testing conditions and methods; standardization efforts and recommendations for quality targets for TV, desktop, and mobile viewing use cases.

Prospective authors should visit http://bts.ieee.org/publications/ieee-transactions-on-broadcasting/information-for-authors.html for information on paper submission. Manuscripts should be submitted at http://mc.manuscriptcentral.com/tbc. Manuscripts will be peer reviewed according to the standard IEEE process.

Important Dates:

- Manuscript submission: December 30th 1st, 2017
- First review completed: March 1st, 2018
- Revised manuscript due: March 21st, 2018
- Final manuscript due: March 31st, 2018
- Publication date: June 2018

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