

CALL FOR PAPERS IEEE SIGNAL PROCESSING MAGAZINE

Special Issue on Multimedia Quality Assessment

The field of multimedia is maturing and one of the positive outcomes is the increasing number of new, innovative and improved products and services. It is, however, no longer sufficient to just add features to a multimedia product or service; it is also vital to measure the added value, in terms of quality, for end-users. The era of user-centric multimedia has already begun and Quality of Experience (QoE) plays a central role, bringing a new and fresh look at the quality and performance of multimedia systems. In contrast to traditional QoS, which aims to capture the system-related characteristics, QoE is not restricted to subjective perception based on fidelity measures. Instead, QoE extends to user behavior/needs, appropriateness, context, usability and other human factors pertaining to delivered content. Evaluation of QoE requires comprehensive subjective quality assessment methodologies and objective quality metrics based on models of human perception, behavior, and sense of presence. These metrics must also incorporate such issues as end-to-end system issues, environmental context, user preference, and human-machine interaction.

The aims of this special issue are to provide researchers and professionals in the field of multimedia signal processing with well-written tutorial-style papers addressing the latest advances in the evaluation and assessment of multimedia quality. The targets are not only traditional media such as speech, audio, image and video, but also new types of emerging media.

Scope of Topics

- Speech and audio subjective and objective quality assessment and metrics
- Image and video subjective and objective quality assessment and metrics
- Audio-visual quality assessments and metrics
- Subjective and objective quality assessment and metrics for new media (UHD, HDR, stereo and multiview, 3D audio, haptics, etc.)
- Human sensory models and their applications to media quality assessment
- Standards, and benchmarking efforts in media quality assessment
- Applications of media quality assessment
- Multimedia quality of experience assessment and metrics

Submission procedure

Prospective authors should submit white papers at <http://mc.manuscriptcentral.com/spmag-ieee> according to the timetable below. White papers should include the motivation, the significance of the topic to be addressed, a brief summary, an outline of the content and the key references. White papers should be no more than 2 pages in the IEEE single-space double-column format.

Schedule:

White paper due:	August 30 th , 2010 (extended deadline)
Invitation notification:	October 30 th , 2010
Manuscript due:	December 24 th , 2010
Acceptance Notification:	January 31 st , 2011
Revised Manuscript due:	April 18 th , 2011
Final Acceptance Notification:	May 16 th , 2011
Final Manuscript due:	July 15 th , 2011
Publication date:	November 2011

Guest Editors:

Touradj Ebrahimi, EPFL/NTNU, Switzerland/Norway (Touradj.Ebrahimi@epfl.ch)

Lina Karam, ASU, US (karam@asu.edu)

Fernando Pereira, IST-IT, Portugal (fp@lx.it.pt)

Khaled El-Maleh, Qualcomm, US (kelmaleh@qualcomm.com)

Ian Burnett, RMIT, Australia (ian.burnett@rmit.edu.au)