



CALL FOR PAPERS
IEEE Transactions on Multimedia
Special Issue on Integration of Context and Content for Multimedia
Management

Guest Editors:

Alan Hanjalic, Delft University of Technology, The Netherlands
Alejandro Jaimes, IDIAP Research Institute, Switzerland
Jiebo Luo, Kodak Research Laboratories, USA
Qi Tian, University of Texas at San Antonio, USA

Important dates:

Manuscript Submission Deadline: April 1, 2008
Notification of Acceptance/Rejection: July 1, 2008
Final Manuscript Due to IEEE: September 1, 2008
Expected Publication Date: January 2009

Submission Procedure:

Submissions should follow the guidelines set out by IEEE Transaction on Multimedia. Prospective authors should submit high quality, original manuscripts that have not appeared, nor are under consideration, in any other journals.

Summary

Lower cost hardware and growing communications infrastructure (e.g., Web, cell phones, etc.) have led to an explosion in the availability of ubiquitous devices to produce, store, view and exchange multimedia (images, videos, music, text). Almost everyone is a producer and a consumer of multimedia in a world in which, for the first time, tremendous amount of contextual information is being automatically recorded by the various devices we use (e.g., cell ID for the mobile phone location, GPS integrated in a digital camera, camera parameters, time information, and identity of the producer).

In recent years, researchers have started making progress in effectively integrating context and content for multimedia mining and management. Integration of content and context is crucial to human-human communication and human understanding of multimedia: without context it is difficult for a human to recognize various objects, and we become easily confused if the audio-visual signals we perceive are mismatched. For the same reasons, integration of content and context is likely to enable (semi)automatic content analysis and indexing methods to become more powerful in managing multimedia data. It can help narrow part of the semantic and sensory gap that is difficult or even impossible to bridge using approaches that do not explicitly consider context for (semi)automatic content-based analysis and indexing.

The goal of this special issue is to collect cutting-edge research work in integrating content and context to make multimedia content management more effective. The special issue will unravel the problems generally underlying these integration efforts, elaborate on the true potential of contextual information to enrich the content management tools and algorithms, discuss the dilemma of generic versus narrow-scope

solutions that may result from “too much” contextual information, and provide us vision and insight from leading experts and practitioners on how to best approach the integration of context and content. The special issue will also present the state of the art in context and content-based models, algorithms, and applications for multimedia management.

Scope

The scope of this special issue is to cover all aspects of context and content for multimedia management. Topics of interest include (but are not limited to):

- Contextual metadata extraction
- Models for *temporal context*, *spatial context*, *imaging context* (e.g., camera metadata), *social and cultural context* and so on
- Web context for online multimedia annotation, browsing, sharing and reuse
- Context tagging systems, e.g., geotagging, voice annotation
- Context-aware inference algorithms
- Context-aware multi-modal fusion systems (text, document, image, video, metadata, etc.)
- Models for combining contextual and content information
- Context-aware interfaces
- Context-aware collaboration
- Social networks in multimedia indexing
- Novel methods to support and enhance social interaction, including innovative ideas integrating context in social, affective computing, and experience capture.
- Applications in security, biometrics, medicine, education, personal media management, and the arts, among others
- Context-aware mobile media technology and applications
- Context for browsing and navigating large media collections
- Tools for culture-specific content creation, management, and analysis

Organization

Next to the standard open call for papers, we will also invite a limited number of papers, which will be written by prominent authors and authorities in the field covered by this Special Issue. While the papers collected through the open call are expected to sample the research efforts currently invested within the community on effectively combining contextual and content information for optimal analysis, indexing and retrieval of multimedia data, the invited papers will be selected to highlight the main problems and approaches generally underlying these efforts.

All papers will be reviewed by at least 3 independent reviewers. Invited papers will be solicited first through white papers to ensure the quality and relevance to the special issue. The accepted invited papers will be reviewed by the guest editors and expect to account for about one fourth of the papers in the special issue.

Contacts

Please address all correspondences regarding this special issue to the Guest Editors Dr. Alan Hanjalic (A.Hanjalic@ewi.tudelft.nl), Dr. Alejandro Jaimes (alex.jaimes@idiap.ch), Dr. Jiebo Luo (jiebo.luo@kodak.com), and Dr. Qi Tian (qitian@cs.utsa.edu).