

IEEE

# MultiMedia

## Call for Papers

# Knowledge Discovery Over Community-Contributed Multimedia Data: Opportunities and Challenges

The explosive growth of digital photos and videos; the prevalence of capture devices; and the advent of media-sharing services, such as Flickr and YouTube, have drastically increased the volume of community-contributed multimedia resources. Billions of photos, videos, and music shared on Web sites profoundly impact human society and pose a new challenge for designing efficient indexing, search, mining, and visualization methods for manipulating such large-scale media. Besides plain visual or audio signals, social media are augmented with rich context—such as user-provided tags, comments, geolocations, time, and device metadata—benefiting a wide variety of potential applications such as annotation, search, recommendation, advertising, and visualization.

The goal of this special issue is to present a concise reference of state-of-the-art efforts in knowledge discovery over large-scale social media, and in particular the entailed opportunities and challenges given the nascent status of this arena. Specifically, the special issue is intended to present both survey and original research articles (in a tutorial manner readable by nonspecialists) on emerging theoretical and practical deployments as well as illustrative applications for annotation, indexing and search, mining, recommendation, advertising, and visualization over social media. It also focuses on the rich context information and its mobile usage for

social media. We believe the special issue will offer a timely collection of information to benefit the researchers and practitioners working in the broad multimedia community.

Topics of interest include, but are not limited to

- social media annotation and tagging,
- large-scale social media search,
- event detection and summarization in social media,
- visualization of social media (for example, event summarization and 3D scene navigation),
- personalized media recommendation,
- contextual media advertising,
- modeling and mining context in social media,
- context-aware mobile multimedia applications,
- social media as training data for classification/detection learning,
- benchmark data for large-scale social media applications,
- distributed/parallel algorithms and platforms for large-scale social media computation, and
- novel and challenging applications of social media.

### Guest editors

- **Tao Mei**, Microsoft Research Asia (tmei@microsoft.com)
- **Winston H. Hsu**, National Taiwan University (winston@csie.ntu.edu.tw)
- **Jiebo Luo**, Kodak Research Laboratories (jiebo.luo@kodak.com)

### Submission procedures and guidelines

Submit your paper at <https://mc.manuscriptcentral.com/cs-ieee>. When uploading your paper, please select the appropriate special issue title under the category “Manuscript Type.” If you have any questions regarding the submission system, please contact Kristen Jarboe at [mm-ma@computer.org](mailto:mm-ma@computer.org). All submissions will undergo a peer review by at least two expert reviewers to ensure a high standard of quality. Referees will consider originality, significance, technical soundness, clarity of exposition, and relevance to the special issue topics.

Papers must stay within the following limits: 6,500 words maximum, 12 total combined figures and tables with each figure counting as 200 words toward the total word count, and 18 references.

### To submit a paper to the October–December 2010 special issue, please observe the following deadlines

- **15 December 2009**: Full submission due (please see the Author Resources page at <http://www.computer.org/multimedia/author.htm> for instructions).
- **1 March 2010**: Authors notified of acceptance, rejection, or needed revisions.
- **5 May 2010**: Revisions due.
- **15 June 2010**: Final versions due.

[www.computer.org/multimedia](http://www.computer.org/multimedia)