Special Issue CFP

Signal Processing
Special Issue on Indexing of Large-Scale Multimedia Signals

INDEXING OF LARGE-SCALE MULTIMEDIA SIGNALS

The effective and efficient indexing of multimedia signals has attracted extensive research interests over last decades. Nowadays, indexing is not merely a technology that helps multimedia search but also the basis of a wide variety of applications and services, such as recommendation, advertising, and personalization. On the other hand, we have witnessed the explosive growing of multimedia data. Such scale brings significant challenges and profound impacts to both the text-based indexing and feature-level indexing of multimedia signals. For example, it is very challenging for many annotation and semantic hashing algorithms to effectively and efficiently handle large-scale multimedia signals, especially when the scale comes up from tens of thousands to tens of millions or even billions. Fortunately, along with the growth of multimedia signals, more and more resources also become available, such as the associated metadata, context and social information. In addition, collaborative tagging, a representative behavior of web 2.0, enables the availability of tags for a large amount of multimedia signals on the Internet. These facts have provided opportunities to tackle the difficulties in large-scale multimedia indexing.

This special issue is intended to bring together the greatest research efforts in indexing of large-scale multimedia signals. The goals of this special issue will be threefold: (1) introducing novel research work and systems on the large-scale multimedia indexing; (2) surveying the progress of this area in the past years; (3) discussing new technologies that will be potentially impactful (primary results are needed). Topics of interest include but not limited to:

Topics of interest include but not limited to the followings:

- Annotation-based indexing, including image/video/audio annotation, concept detection, annotation refinement, categorization, etc.

- Tag-based indexing, including image/video/audio tagging, tag recommendation, tag refinement, tag enrichment, etc.

- Feature-level indexing, including hashing, inverted file indexing, visual dictionary construction and refinement, etc.

- Large-scale multimedia duplicate/near-duplication/copy detection and localization.

- Multimedia representation, including feature extraction, distance learning, similarity learning, kernel learning, etc.

- Techniques for speeding up multimedia categorization, ranking, re-ranking, presentation, etc.

- Indexing based applications, including search, summarization, browsing, management, sharing, advertising, etc.

- Benchmark for research on indexing.

Submission Details

Authors should prepare their manuscript according to the Guide for Authors available from the online submission page of the Signal Processing at http://ees.elsevier.com/sigpro/. All the papers will be peer-reviewed following the Signal Processing reviewing procedures.

Important Dates

- Paper submission due: Nov. 1, 2011

- First notification: February 1, 2012

- Revision: April 1, 2012

- Final decision: June 1, 2012

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