

## **CFP: Special Issue of IEEE Transactions on Multimedia**

### **“Object and Event Classification in Large-Scale Video Collections”**

In spite of great progress achieved in the field of object and event classification in video reported over the past years, and assessed extensively in the TRECVID context, the existing solutions do not yet scale well towards realistic, large-scale video data collections and use cases. These collections and use cases being of practical interest are characterized not only by vast amount of data to be analyzed, but also by an enormous diversity of objects and events that are to be indexed and an immense variance in object appearance and event realization. For instance, even the research on the well-studied problem of face detection that can be considered reasonably solved in a constrained domain has not yet led to solutions capable to detect faces robustly in a general scene context, arbitrary lighting conditions and a varying pose and degree of occlusion. A more complicated example is the detection of “goal” events in soccer, which can be taken from many different camera angles, and realized from a many different actions on the field. Finally, “suspicious” events in a surveillance video may contain a vast variety of types and realizations of events, such as crowd forming, people fighting, or appearance of new objects in the scene, where, in addition, the properties of the scene may vary greatly depending on where the camera is positioned.

Targeting the researchers and practitioners from industry and academia, this special issue focuses on the problem of handling large-scale object and event detection in video (strongly encouraged to use the TRECVID evaluations to facilitate comparisons), and aims at collecting a set of high-quality contributions addressing various aspects of this problem and in various domains, such as (but not limited to) personal video collections (home video), surveillance and professional (broadcast) content. We solicit original surveys and technical papers which are *tailored to* large-scale settings and address one of the following major topic clusters:

1. Generic object features and event models,
2. Extrapolation of known indexing, retrieval and classification concepts to a large-scale use case,
3. Efficiency, implementation and system-related issues in indexing and classification of large-scale video collections,
4. Online/incremental/transfer learning for object and event classification in large-scale video,
5. Domain-specific (e.g., cooking and travel video) video analysis in large-scale setting,
6. Multimodal approach to large-scale video analysis,
7. Benchmark setting for evaluating large-scale object and event classification,
8. Other novel solutions tailored to large-scale video data management, summarization and retrieval

### **Important Dates**

Submission deadline:	<del>13-Jan-2011</del> 27-Jan-2011
First notification:	10-Apr-2011
Revised manuscript (for second review) due:	09-Jun-2011
Notification of acceptance:	10-Aug-2011
Final manuscript due:	08-Sep-2011
Tentative publication date:	February 2012

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