

Computer Vision and Image Understanding Call for Papers

Special Issue on “Learning from Multiple Evidences for Large Scale Multimedia Analysis”

Scope:

The information obtained from multimedia data consists of multiple evidences, e.g., internet images are usually accompanied with a textual descriptions and social network metadata. Learning from such multiple evidences for large scale multimedia content analysis is an interesting research topic, with a range of important applications, such as multimedia retrieval, event detection, indexing, etc. It is well known that combining visual feature with automatic speech recognition usually yields better performance than using visual feature only in video concept detection. However, for large scale multimedia data analysis this research area is still in its infancy. There are many challenges confronted in this area, ranging from what the appropriate fusion schema are to real-world scalability issues. It is also necessary to investigate new applications built atop multiple evidences for broad utilities. To provide readers of the special issue with a state-of-the-art background on the topic, we will invite one survey paper, which will undergo peer review.

This special issue seeks to present and highlight the latest development on large scale multiple evidence learning for multimedia analysis. Papers addressing interesting real-world applications are especially encouraged. Topics of interest include, but are not limited to,

- Multiple evidence extraction by machine learning techniques
 - Machine learning based multimedia feature design from different information types
 - Feature selection from multiple feature sources
 - Learning for cross media information extraction and representation
- Multiple evidence fusion algorithms
 - Large scale multi-view learning for multimedia analysis
 - Manifold learning and subspace learning for information fusion in large scale multimedia analysis
 - Semi-supervised learning from multiple evidences for large scale multimedia analysis
 - Distance metric learning from multiple evidences
 - Learning from multiple evidences for ranking
 - Multiple kernel learning for fusion
- Applications
 - Information fusion (e.g., visual feature, ASR, OCR) in large scale video data analysis

- Combing content and metadata for web media analysis
- Cross media retrieval and annotation
- Multimedia event detection

Important Dates:

- Paper Submission: Sep. 15, 2012
- First Notification: Dec. 1, 2012
- Revised Manuscript: Feb. 1, 2013
- Notification of Acceptance: Mar. 15, 2013
- Final Manuscript Due: Apr. 30, 2013
- Publication Date: Second Quarter of 2013

Guest Editors:

- Yi Yang, Carnegie Mellon University, USA. yyang@cs.cmu.edu.
- Nicu Sebe, University of Trento, Italy. sebe@disi.unitn.it.
- Cees Snoek, University of Amsterdam, the Netherlands. cgmsnoek@uva.nl.
- Xian-Sheng Hua, Microsoft Research Asia, China. xshua@microsoft.com.
- Yueting Zhuang, Zhejiang University, China. yzhuang@cs.zju.edu.cn.