1. Summary and Scope

Living in the era of data deluge, we have witnessed a drastic growth of heterogeneous data involved in multimedia content analytics. The heterogeneous data exhibits a rich and complex set of cross-media contents, such as text, image, video, audio, and graphics. Consequently, it has aroused new challenges in developing effective methodologies to meet the heterogeneous computing requirement. The hybrid data come from multiple sources and hence are hybrid in different feature spaces. It is mandatory to pay more attention to the entire cycle of heterogeneous data processing, including data acquisition, retrieval, feature representation, knowledge discovery, and semantic modeling.

This special issue serves as a forum to bring together active researchers all over the world to share their recent advances in this exciting area. We solicit original contributions in three-fold: (1) present state-of-the-art theories and novel application scenarios related to heterogeneous knowledge learning for multimedia analysis; (2) survey the recent progress in this area; and (3) build benchmark datasets.

The list of possible topics includes, but not limited to:

- Large-scale heterogeneous information fusion
- Domain adaptation learning over heterogeneous data
- Machine learning methods for multimedia understanding
- Heterogeneous big data organization, retrieval, and indexing
- Deep Learning for multimedia data analysis
- Multimedia question-answering with heterogeneous data
- Learning methods to bridge the semantic gap among media types
- Health, economics and other applications over heterogeneous data
- Real-world applications based on multimedia analysis
- Novel dataset and benchmark for heterogeneous knowledge learning
- Survey papers regarding the topics of heterogeneous knowledge learning
2. Submission Guideline
Authors should prepare their manuscripts according to the online submission requirements of “Multimedia Tools and Applications” (MTAP) at https://www.editorialmanager.com/mtap/default.aspx. All the papers will be peer-reviewed following the MTAP reviewing procedures. The submissions should clearly demonstrate the evidence of benefits to society or large communities. Originality and impact on society, in combination with the media nature and innovative technical aspects of the proposed solutions, will be the major evaluation criteria.

3. Important Dates
Submission Deadline: October 15th, 2016
First Review Decision: November 15th, 2016
Revisions Due: December 30th, 2017
Second Review Decision: January 30th, 2017
Final Manuscript: March 15th, 2017

4. Guest Editors
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