

## Call For Paper



### **ACM Transactions on Multimedia Computing, Communication and Applications (TOMM)**

#### **Special Issue on Multimedia Big Data: Networking**

Multimedia, the biggest big data, including game media, social images, voices and videos, medical images, to name just a few, continue to outstrip the capacity of the traditional multimedia processing and analysis systems. For handling this issue, researchers developed and presented many technologies and applications to connect big data to multimedia processing, which plays an important fields in existing multimedia computing. Further, in real-time required scenarios, such as cloud game systems, have strict delay limitation in interaction, multimedia data processing needs much higher performance networking support. However, networking for multimedia big data processing, communications and applications have attached less attention so far. Even though the size of multimedia big data increased rapidly in recent years, the fundamental networking technologies are hard to afford the requirements of more and more complex processing and analysis. Further, in real-time required scenarios, such as cloud game systems, have strict delay limitation in interaction, multimedia data processing needs much higher performance networking support. New networking technology, also brings a new possibility of the multimedia systems, e.g. processing and analyzing more and more multimedia data brought by smartphones in developing mobile networks have become a very important field in multimedia big data computing. Therefore, since networking plays an essential role in multimedia big data computing, there is a critical need for research into a new concept, designs and implementation that can support more reliable, efficient and real time multimedia big data computing, communications and applications.

The goal of this special issue is to seek original articles examining the state of the art, open challenging research issues, new research results and solutions in networking issues in multimedia big data computing, processing and analytics. All submissions should contain substantial tutorial contents and be accessible to a general audience of researchers and practitioners.

Topics of interest include, but are not limited to:

- Network architecture design for Multimedia Big Data
- Networking for large scale video game system
- Next generation network for Multimedia Big Data
- Data center network for Multimedia Big Data computing
- Network for Multimedia Big Data
- Networking for real time multimedia processing
- UHD Multimedia streaming
- Network modelling for Multimedia Big Data
- Distributed systems for Multimedia Big Data
- Parallel and distributed algorithms for Multimedia Big Data
- Data migration and backup for Multimedia Big Data
- Data synchronization for Multimedia Big Data
- Real-time protocols for multimedia Big Data
- Multicast and group communication for multimedia Big Data
- Network performance analysis in Multimedia Big Data
- QoE in Networking for Multimedia Big Data

### **Submission Instructions**

Papers will be evaluated based on their originality, presentation, relevance and contributions, as well as their suitability to the special issue. The submitted papers must be written in excellent English and describe original research that has not been published nor currently under review by other venues. Previously published conference papers should be clearly identified by the authors at the submission stage and an explanation should be provided about how such papers have been extended to be considered for this special issue. Extended conference contributions must have at least 50% difference from the original works (the authors must indicate the conference name and make a reference to the base conference paper). Guest editors will make an initial determination on the suitability and scope of all submissions. Papers that either lack originality, clarity in presentation or fall outside the scope of the special issue will not be sent for review and the authors will be promptly informed in such cases.

The submitted papers will be reviewed by at least three independent reviewers. Final acceptance will be based on their qualities and their relevance to the theme of this special issue and should be approved by the journal editors. Manuscripts must be prepared for publication according to the journal's Author Guidelines available at: <http://tomm.acm.org/>. Submissions must conform to the layout, format and page limit in the guidelines. The authors must select "SI: Networking-BigData" when they reach the "Article Type" step in the submission process.

### **Important Dates**

Paper submission due:	December 15, 2015 (Firm Deadline)
Decision notification:	February 15, 2016
Revision due:	April 15, 2016
Acceptance notification:	June 15, 2016
Camera ready version due:	July 1, 2016
Publication date:	October 2016

### **Guest Editors**

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