Call For Papers
Special Issue of IEEE Transactions on Multimedia
"Cloud-Based Mobile Media: Infrastructure, Services and Applications"

Recent advances in smart phone technologies have fueled a new wave of user demands for rich mobile experience. Today's mobile users not only expect broadband connection wherever they go and interaction with each other via social network on the road, but also seek ubiquitous access to a wealth of media-based contents and services. Since mobile devices are inherently resource-limited, cloud computing is emerging as a promising technology to provide additional resources for many media-rich mobile applications. However, the synthesis between mobile media and cloud computing should be well orchestrated to address many technical challenges arising in this exciting space. The fundamental tension between resource-hungry multimedia streams and power-limited mobile devices has yet to be resolved, and is complicated by novel ways of operating mobile devices as both media clients and content providers. Efforts for providing a universal rich-media experience across any screen is typically hindered by the heterogeneity amongst ever-evolving mobile devices, as manifested in their different physical form factors, middleware platforms, and interactive features. This challenge is further aggravated by business concerns from different service providers (e.g., Telcos, MSOs and ISPs), as well as security concerns from users and content providers. These daunting challenges are better tackled by an interdisciplinary approach. In this special issue, we invite original research and review articles that study the interactions among advanced multimedia technology, cloud computing, mobility, and social networking.

Potential topics include, but are not limited to:

* Enhanced QoS for mobile media	* Cloud-assisted media content recommendation
* Mobile multimedia content delivery	* User-centric media adaptation in the cloud
* Multimedia search on mobile devices	* Interactive media rendering
* Distributed caching of media data	* Service-oriented media management
* Cloud-based multimedia processing	* Cloud-based mobile media system
* Media cloud resource management	* Mobile media security and privacy

Authors are encouraged to contact guest editors for the appropriateness of their topics. Before submission, authors should carefully read over the journal's Author Guidelines, which are located at http://www.signalprocessingsociety.org/tmm/tmm-author-info/. Prospective authors should submit an electronic copy of their complete manuscript to the IEEE Transactions on Multimedia online manuscript system, Manuscript Central, via http://mc.manuscriptcentral.com/tmm-ieee according to the following timetable:

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Final Editorial Decision: August 1, 2012
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