

Special Issue on
“Network Technologies for Emerging Broadband Multimedia Services”
Journal of Visual Communication and Image Representation (JVCI)

With the rapid proliferation of multimedia data, including audio, image, video and graphics, and the great advance of multimedia technologies such as the JPEG and MPEG standards, more and more network-based multimedia Applications (e.g. IPTV, VoD, VoIP etc.) emerge and they have become part of our daily life. All these applications share a basic requirement, i.e. broadband services. Indeed, driven by the rapid growing demand of multimedia service, broadband Internet access is now a common setup for many Internet users in modern cities. In May 2008, US broadband penetration has reached 89.3% among active Internet users.

Nevertheless, despite the high data rate, the broadband multimedia services are not satisfactory. For example, a computer may enjoy a 100Mbps of data rate connection to the Internet. However, even streaming 500kbps of a video clip may still suffer from occasion playback interruptions. This is mainly due to lack of QoS support in the Internet. Here is just one example to show the challenge of providing good-quality broadband multimedia services. The situation becomes even more challenging when we consider a variety of networks, diverse end users, notorious wireless channels, mobility, inter-networking, co-existence of different types of traffic, etc.

The goal of this special issue is to solicit the state-of-the-art approaches and technical solutions in the area of network technologies for emerging broadband multimedia services. The issue will provide a convincing forum for researchers and practitioners to present their latest research results.

Scope

The scope of this special issue is to cover all aspects that relate to network technologies and media control technologies for emerging broadband multimedia services. Topics of interest include, but are not limited to:

- New protocols for multimedia services
- New multimedia architectures/platforms
- Network security for multimedia services
- Performance evaluation of multimedia services
- Network measurement/monitoring for multimedia services
- Pricing, accounting and billing for multimedia services
- Reliability, availability, serviceability of multimedia services
- Seamless mobility of multimedia services
- Management of multicast and broadcast multimedia services
- Multimedia management in next generation networks
- Multimedia services in mobile and broadband wireless networks
- P2P multimedia streaming
- QoS management in multimedia networks
- Cross-layer optimized multimedia networks
- IPTV and emerging applications
- Network coding technology for multimedia delivery
- Cooperative or collaborative communications for multimedia services

- Adaptation, reconfiguration and transcoding of multimedia services

Information for Authors

Authors should prepare their manuscript according to the Guide for Authors available from the online submission page of the 'Journal of Visual Communication and Image Representation' at <http://ees.elsevier.com/jvci/>. When submitting via this page, please select “**Network Technology_EBMS**” as the Article Type. Prospective authors should submit high quality, original manuscripts that have not appeared, nor are under consideration, in any other journals. All submissions will be peer reviewed following the JVCI reviewing procedures.

Important Dates:

Manuscript Submission Deadline:	December 1, 2008
Notification of Acceptance/Rejection:	March 1, 2009
Final Manuscript Due to JVCI:	April 1, 2009
Expected Publication Date:	June, 2009

Guest Editors:

Jianfei Cai, School of Computer Engineering, Nanyang Technological University, Singapore. (asjfc@ntu.edu.sg)

Shivkumar Kalyanraman, Department of Electrical, Computer and Systems Engineering, Rensselaer Institute of Technology, USA. (shivkuma@gmail.com)

Marco Rocchetti, Dipartimento di Scienze dell'Informazione, Università di Bologna, Italy. (roccetti@cs.unibo.it)

Hwangjun Song, Department of Computer Science and Engineering, POSTECH(Pohang University of Science and Technology), Korea. (Hwangjun@postech.ac.kr)

Dapeng Oliver Wu, Department of Electrical & Computer Engineering, University of Florida. USA. (wu@ece.ufl.edu)