

Call for Papers



16th IEEE Int'l Conference on Computer Communication and Networking
(IC³N)

Hawaii, August 13-15, 2007

Symposium on Multimedia Coding and Communication over Wireless and Mixed Network

Abstract:

Recent advances in computing and wireless communication technology leads to the proliferation of mobile devices connected by a variety of wireless links. This have opened up new opportunities for richer and better multimedia applications like on-demand mobile video streaming, mobile TV, peer to peer mobile video, surveillance and other security related wireless video applications. The objective of the track is to investigate approaches that can deliver better end-to-end multimedia QoS for the content providers/consumers, improve the radio resource utilization, and increase the network capacity for network operators. These can include advanced source/channel coding, optimized media streaming technologies, scalability and error-resilience in source coding, adaptation, rate-less channel codes and their application in media unicast / multicast streaming, cross-layer design of routing, scheduling and resource allocation, multi-user collaboration schemes and peer to peer streaming, distributed coordination and optimization decomposition schemes for wireless multimedia networking, etc.

In this symposium, we seek original contributions that address issues in source/channel coding and adaptation, wireless networking and optimization. Research papers of particular merit in the symposium will be invited for consideration of fast track publication in a special issue for *Journal of Advances in Multimedia*, (<http://hindawi.com/GetJournal.aspx?journal=AM>). Topics of interest include but are not limited to:

1. **Signal process and media coding for wireless multimedia transmission**
2. **Scalability and error-resilience in multimedia streaming**
3. **Media transcoding and adaptation for wireless delivery**
4. **Digital fountain codes and its application in multimedia streaming and broadcasting**
5. **Complexity reduction and energy efficiency in mobile multimedia communication**
6. **Distributed (Wyner-Ziv) coding for complexity adaptation and error-resilience**
7. **Joint source/channel coding and error control for wireless multimedia broadcasting**
8. **Cross-layer optimization and multi-user collaboration in multimedia wireless access network scheduling and resource allocation**
9. **Distributed optimization in wireless multimedia networking, auctions, pricing schemes and game theoretical approaches.**
10. **Routing, scheduling, resource management, and session control in multimedia communication over mobile ad hoc and mesh network**
11. **Graphics content coding and error-concealment for wireless mobile gaming.**

12. Applications and Architecture: Mobile TV, on-demand media streaming
 13. Flow control and congestion control in wireless multimedia
 14. Network coding in wireless multimedia
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Important Dates:

- Paper submission deadline: **March 1, 2007**
- Notification of acceptance: **May 11, 2007**
- Camera ready papers due: **June 1, 2007**

Symposium Technical Co-Chairs

Zhu Li , PhD Multimedia Research Lab (MRL) Motorola Labs, Schaumburg, IL, USA	Jin Li , PhD Communication and Collaboration Group Microsoft Research Redmond, WA, USA
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Technical Program Committee

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