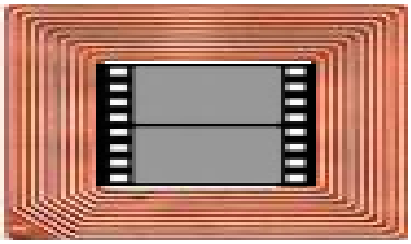
Special Issue on New Achievements in Pervasive and Interactive Multimedia Systems and Applications



Recent technological advancements have transformed almost any computer, electronic device and appliance into concrete multimedia systems. From a simple laptop to the hype iPod, from wearable computers to wireless sensors, from RFID tags to cell phones, those systems have pervasively got into our homes, offices and places where we have fun, deeply revolutionizing our lifestyle and common habits. What's really new here is that, surprisingly, not only we can use these devices in a passive way, to listen to music or watch TV for example, but we can use them to customize and adapt all the information we want to receive: We are about to spend our days in an environment saturated with computing and communication devices able to produce and/or adapt a lot of multimedia contents, based on a set of sophisticated interactions these systems carry out with us, as well as with the environment surrounding us. One of the key issues is how to structure this universe of devices and applications, without bothering users with an explicit awareness of the underlying communications and computing technologies, while guaranteeing to them a full control on the results. To this aim, new technical challenges include several different aspects, ranging from the underlying network (is the client-server communication model adequate to support all this?) to the human computer interaction interface (how can a human being simply interact with an embedded system or an RFID tag?) and to the privacy/security mechanisms (how can we ensure privacy in such a pervasive environment?). The goal of this special issue is to collate and disseminate recent and relevant contributions in the area of Pervasive and Interactive Multimedia Systems and Applications including content representation, customisation, indexing, access, protection and transmission. Papers are solicited that cover the topics including but not limited to:

- Pervasive and interactive multimedia systems including mobile systems, pervasive gaming, and digital TV
- Techniques and architectures for streaming media
- Multimedia delivery to wireless embedded devices
- Mobile content distribution networks
- Multimedia QoS support for wired and wireless networks
- MAC protocols with multimedia QoS support in wireless networks
- Multimedia QoS in peer-to-peer and overlay networks
- Online gaming (Service, architecture, protocol, and security)
- Privacy and Security Issues
- Distributed services middleware and systems for multimedia communications (e.g. Open Service Interfaces)
- TV-centric home networks, DTV, and home networked entertainment and games
- Information hiding and watermarking
- Multimedia Standards, formats and models for multi-channel content distribution
- GRID and distributed systems for content production
- Web services for content distribution; distribution with P2P architectures
- Legal aspects related to digital content (e.g., digital rights management); business, payment and transaction models

Only original and unpublished research papers will be considered. Prospective contributors should submit papers in A4/US letter, single column, double space format, up to 30 pages long including figures, tables and references. Authors should submit a pdf version of their manuscript (which should be compressed if the file size exceeds 1 MB) according to the timetable, directly to the e-mail address of Marco Roccetti: roccetti@cs.unibo.it. Camera-ready papers will have to conform to the manuscript style of the target journal www.springer.com/journal/11042/about

Timetable

Manuscript Submission:
February 15, 2007
Acceptance Notification:
May 1, 2007
Final Manuscript Due:
July 1, 2007
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First available issue

Guest editors

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