Overview

With the fast developments in electronics industry and the amazing growing of the potential customers, multimedia are increasingly ubiquitous: more and more people live in a world of Internet pop-ups and streaming television, mobile phone texting and video clips, MP3 players and pod-casting. Especially, there have been rapid advancements in 3D techniques and technologies. A number of systems have been developed for dynamic 3D reconstruction from multiple view videos over the past decade. Hardware has both improved and become considerably cheaper, making real-time and interactive 3D available to the hobbyist, as well as to the researcher. There have been major studies in such areas as molecular modeling, photogrammetry, flight simulation, CAD, visualization of multidimensional data, medical imaging, tele-operations such as remote vehicle piloting and remote surgery, and stereolithography. In computer graphics, the improvements in speed, resolution, and economy make interactive stereo an important capability. Old techniques have been improved, and new ones have been developed. True 3D is rapidly becoming an important part of computer graphics, visualization, virtual-reality systems, and computer gaming. Numerous 3D systems are granted patents each year, but very few systems move beyond the prototype stage and become commercially viable. Here we treat the salient 3D systems. Therefore, the 3D contents and applications will be the trends of the future multimedia communication. This special issue invites high quality scientific contributions in 3D multimedia communication, with a focus on how to apply the semantic 3D technologies to the acquisition, generation and transmission. Moreover, the discussions on future challenges in 3D content, codec, design and implementation of related multimedia communication are also encouraged.

The objective of this Special Issue is to invite high state-of-art research contributions, tutorials, and position papers that address the broad challenges of integrating ubiquitous media technologies into everyday objects, devices and activities with the communications and computing techniques of the multimedia signal for the current novel and future network services. Original papers describing completed and unpublished work not currently under review by any other journal/magazine/conference/special issue are solicited.

Topics of primary interests include, but are not limited to:

- 3D/2D content generation, representation focusing on low-cost 3D/2D video codec
- Multimedia development, fusion and application in 3G, sensor network, IOT (internet of things), etc
- New applications of 3D/2D modeling
- Network design for 3D/2D video transmissions
- Solutions of 3D signal transmission over wireless network
- Multimedia application for mobile terminals and embedded systems
- Error resilience and concealment for 3D/2D
- 3D/2D signal Performance evaluation, QoS, QoE, etc

Submissions

All the papers should be full journal length versions and follow the guidelines set out by Multimedia Tools and Applications (http://www.springer.com/computer/information+systems/journal/11042). Manuscripts should be submitted online at http://mtap.editorialmanager.com choosing "**Ubiquitous 3D Video Design** - " as article type, no later than July 15, 2011. Information about the manuscript (title, full list of authors, corresponding author's contact, abstract, and keywords) should also be sent to the corresponding editor. All the papers will be peer-reviewed following the MTAP reviewing procedures.

Important Dates

- Submission of paper: ~~Jul. 15, 2011~~, extended to Aug. 30, 2011
- First-round acceptance notification: Oct. 15, 2011
- Revision: Nov. 30, 2011
- Final decision: Jan. 15, 2012
- Publication of special issue: First Quarter of 2013

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