

Call For Papers

Journal of Visual Communication and Image Representation

Special Issue on

High Dynamic Range Imaging

High dynamic range imaging (HDRI) is an emerging technology, which has the potential to bring a new revolution in digital imaging. In HDRI, the image files record the actual colour and dynamic range of the real world scene rather than the limited gamut and dynamic range of the monitor or other reproduction media. This means that image processing, manipulation, display, recognition and other operations will no longer be limited by the number of bits used to represent each pixel. Therefore, HDRI will have widespread applications in digital cinema, digital photography, computer games, etc., and will open up many new possibilities, including dramatically improving the visual realism of digital photographs and videos, enabling the development of more accurate computational vision techniques, etc. Many in academic and industry have advocated that the future of digital photography and video is high dynamic range imaging. It is anticipated that in the next decade, the imaging industry will inevitably move to HDRI which will affect all aspects of the imaging pipeline, from capture (sensor, camera), to storage (compression coding) to reproduction (rendering, tone mapping, printing and display). New image processing and computational vision algorithms will also be developed around this new emerging imaging paradigm.

This special issue will highlight new research directions and the latest technological advancement in high dynamic range imaging and video by collecting papers in all relevant areas of HDRI. We invite researchers and practitioners to submit their original unpublished work to this special issue. We solicit papers dealing with high dynamic range imaging subtopics drawn from all stages of the high dynamic range imaging pipeline. This includes, but is not limited to, the following topics

- Capture devices
- Multi-exposure techniques
- Response curve recovery
- Noise
- Ghost removal
- Encoding for images and video
- File formats for images and video
- Applications of HDRI
- Image-based lighting
- Dynamic range reduction
- HDR display devices
- Validation of techniques and algorithms
- Colour science
- Colour appearance modeling

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 "HighDynamicRangeImaging" as the Article Type.

Important Dates

Deadline for Submission:	15 November, 2006	Final papers due:	15 April, 2007
Notification of Acceptance:	15 March, 2007	Planned Publication:	August 2007

Guest Editors

Guoping Qiu, School of Computer Science, University of Nottingham (qiu@cs.nott.ac.uk)

Erik Reinhard, Department of Computer Science, University of Bristol (reinhard@cs.bris.ac.uk)

Graham Finlayson, School of Computing Sciences, University of East Anglia (graham@cmp.uea.ac.uk)