

## Paper Submission

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. All open submissions will be peer reviewed subject to the standards of the journal. Manuscripts based on previously published conference papers must be extended substantially.

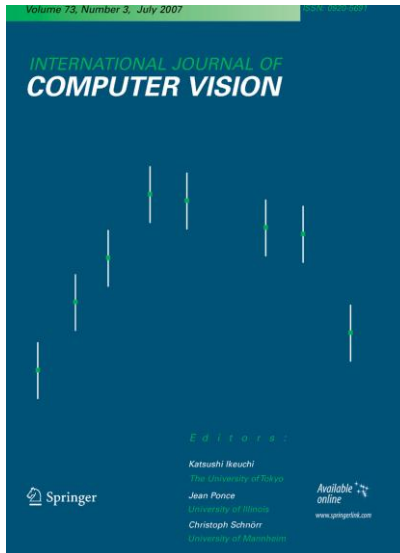
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Manuscripts should be submitted to: <http://VISI.edmgr.com>. This online system offers easy and straightforward log-in and submission procedures, and supports a wide range of submission file formats.

## Important Dates

- Paper submission deadline: February 28, 2013
- Final Manuscript: August 15, 2013

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### Editors-in-Chief:

**Katsushi Ikeuchi**, *The University of Tokyo, Japan*

**Christoph Schnörr**, *University of Heidelberg, Germany*

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# Special Issue Call for Papers

## Computational Photography

### Guest Editors:

**Fredo Durand**, MIT, [fredo@mit.edu](mailto:fredo@mit.edu)

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The field of Computational Photography seeks to create new photographic functionalities and experiences that go beyond what is possible with traditional cameras and image processing tools. High quality and novel full-paper submissions on the following topics are encouraged:

- **Computational Cameras:**

The use of optical coding followed by computational decoding to produce new or enhanced images and videos. Examples include catadioptric, coded aperture, integral/plenoptic, coded exposure, lensless, assorted pixel, compressive, holographic and depth imaging. Novel computational image detectors that facilitate the creation of new images are also included.

- **Multiple Images and Camera Arrays:**

The use of multiple images captured sequentially or simultaneously followed by processing to produce new or enhanced images. Examples include mosaicing, creation of collages and montages, refocusing, and light field rendering. Also included are the use of multiple images to achieve high dynamic range, extended depth of field, super-resolution, denoising, multispectral imaging and polarization imaging.

- **Computational Illumination:**

The use of programmable light sources to capture images followed by processing to produce new or enhanced images. Examples include structured light for depth/normal estimation, image based relighting, flash/no-flash methods for image enhancements, separation of reflection components, detection of material properties and light transport measurement and manipulation.

- **Computational Displays:**

3D, stereoscopic, and volumetric displays, bi-directional displays, high dynamic range displays, projector-camera systems, omni-displays, interactive displays and perceptually-driven displays.

- **Scientific Photography and Videography:**

The use of imaging systems to gather quantitative information about physical systems and processes as diverse as individual cells and galaxies. Examples include application in microscopy, biomedical imaging, remote sensing and astronomy.

- **Organizing and Exploiting Photo and Video Collections:**

The development of novel techniques for intelligent browsing as well as the use of image collections to produce new or enhanced visual media. Examples include hole filling, intelligent compositing, and organizing and navigating large image collections

- **Advanced topics in optics:**

The development of techniques for wavefront coding, light field sensing, compressive optical sensing, digital holography, unusual form-factor cameras and optical superresolution.

All papers will undergo the same rigorous IJCV review process. Please refer to the IJCV website for detailed instructions on paper submission. The review process will be single-blind. The editors reserve the right to reject without review submissions that either low quality or are not related to computational photography. If a preliminary version of the paper appeared in a prior conference (say, ICCP), a detailed description of the differences between the submissions is required.



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