Call for Papers

Journal of Real-Time Image Processing - JRTIP

Special Issue on Field-Programmable Technology for Real-Time Image Processing

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Field-programmable technologies, such as the Field-Programmable Gate Array (FPGA), provide high-performance platforms for real-time image and video processing applications. Several FPGA-based architectures have been proposed to solve particular problems, such as two-dimensional filtering, wavelet transforms, and motion-vector estimation. Many of these architectures have been published in various FPGA-related conferences.

Submissions are called for a special issue of the new periodical Journal of Real-Time Image Processing on “Field-Programmable Technology for Real-Time Image Processing”. The aim of this special issue is to bring together the most recent developments, and survey the state-of-the-art in the use of programmable logic solutions for real-time image and video processing.

Prospective authors who aim to contribute to this special issue are encouraged to submit original and unpublished papers dealing with theory or practice of real-time image processing on field-programmable technology. Papers and reviewers are solicited in any of the following or related areas:

- Novel uses of FPGA architectural features, such as embedded components, to accelerate image processing.
- Real-time computer vision and motion detection on programmable logic devices.
- Reconfigurable hardware-based motion vector estimation.
- Hardware-efficient image linear and non-linear filtering architectures.
- FPGA-based edge detection and spectral transforms.
- Hardware-efficient two-dimensional wavelet architectures.
- Specialized image processing hardware compilation and synthesis for reconfigurable devices.
- Reconfigurable architectures for image compression and decompression.

IMPORTANT DATES
Papers due: May 10, 2007
Review completed: June 28, 2007
Camera-ready paper due: August 5, 2007

SUBMISSION
The review process will operate on a "fast track" basis: prior to sending submissions, please send a 100-200 word abstract to the guest editor for approval. The guidelines for authors and reviewers are available for download on the webpage of the Journal of Real Time Image Processing, JRTIP: http://www.springer.com/journal/11554. Submissions can be made via http://www.editorialmanager.com/jrtip/default.asp, indicating that they should be scheduled for publishing in the Special Issue on Field-Programmable Technology.

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Journal of Real-Time Image Processing
Editors-in-Chief: Kehtarnavaz, N.; Carlsohn, M.F.
ISSN: 1861-8200 (print version)
ISSN: 1861-8219 (electronic version)
Journal no. 11554