

CALL FOR PAPERS

International Journal Of Computer Vision

SPECIAL ISSUE ON

Object Tracking And Classification Beyond The Visible Spectrum

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Aim and Scope: Developing robust computer vision algorithms for real-world applications is a major challenge today and will continue to be one for the next decay. Most of existing vision-based systems designed for day and night vision in visible-infrared- and thermal-spectrum are build upon fundamental building blocks like object detection, tracking and classification. The topic of Object Tracking and Classification Beyond the Visible Spectrum (OTCBVS) encompasses many disciplines, including infrared, far infrared, millimeter wave, microwave, radar, synthetic aperture radar, and electro-optical sensors as well as the very dynamic topics of image processing, computer vision and pattern recognition. It is a fertile area for growth in both research analysis and experimentation and includes both civilian and military applications. The availability of ever improving computer resources and continuing improvement in sensor performance have given great impetus to this field of research. This technology "push" has been balanced by a technology "pull" resulting from increasing demand from potential users of this technology including both military and civilian entities as well as needs arising from the growing field of homeland security.

Open CFP, Topics and Submission Guidelines

- This special issue of IJCV on Object Tracking and Classification Beyond the Visible Spectrum, solicits original contributions in the following areas, but other topics dealing with non-visible ranges and sensors are welcome: (1) *Object Detection and Tracking*; (2) *Object Recognition and Classification*; (3) *Pose Estimation and Tracking*; (4) *Vision and Radar Fusion*; (5) *Combining Visible and non-Visible Signals*; (6) *Face Recognition in non-visible spectrum*; (7) *Automotive, Medical and Military Applications*. The object category includes, but not limited to, human facial features, face, driver, pilot, seat occupants, pedestrian, lane, vehicles, airplanes, landmines, tanks, and missiles. A special attention will be given to vision algorithms where non-visible range sensors are employed. Comparative evaluation studies across the non-visible spectrum for a given computer vision or pattern recognition task are encouraged. Sensors of interest include infrared, millimeter wave, radar, and hyper-spectral.

- This is an open call-for-papers. Submissions are highly encouraged from outside the IEEE CVPR OTCBVS'04 workshop. Very few participants of the workshop were invited to submit a full paper of their contribution. However, this invitation is not a guarantee that the paper will be finally included in the special issue. IJCV is a very high-ranking computer vision journal and the Editors-in-Chief of IJCV has clearly indicated that we have to adopt a rigorous external reviewing policy to assure the quality of the contributions. All submitted papers will receive equal amount of attention during the reviewing process.

- Only original, high-quality papers, in-line with the IJCV standard guidelines, will be considered for publication in this special issue. Prospective authors should submit electronically their contributions according to the two instructions below:

- 1- Upload your paper and video clip to the ftp site: <ftp.wkap.com>. The author login for the ftp site is: ijcv-author. The password is ijcv-upload. The manuscripts should be submitted in PDF and that supporting video clips are in MPEG format. ****Note: Video Clips are limited to 2 minutes (5MG).****

- 2- Send notification of the uploaded materials to the IJCV Journals Editorial Office at the following e-mail address: ijcv@springer-sbm.com. The following information should be included in your e-mail: (1) *Title of the paper*, (2) *Authors names*, (3) *Corresponding authors complete contact information and e-mail addresses for all authors*, (4) *Name of special issue and the Guest Editor's*, (5) *Abstract*, (6) *List of Keywords*, and (7) *Number of pages and number of videos*.

Submission deadline, publication date

- **Submission of full manuscripts: December 20, 2004.**
- **Notification to authors: May 02, 2005.**
- **Submission of revised manuscripts: July 02, 2005.**
- **Final decision on accepted papers: August 22, 2005.**
- **Publication of special issue: Last quarter of 2005.**