

It is our pleasure to welcome you to the Sixth Annual IEEE Workshop on Object Tracking and Classification Beyond and in the Visible Spectrum. This workshop is part of the Computer Vision and Pattern Recognition (CVPR) Conference, sponsored by the IEEE Computer Society, and IEEE is publishing the workshop materials. The success of this series of workshops is evidenced by the fact that this workshop is the sixth in the series, and that Springer Books will publish selected papers from the '08 and '09 meetings. This book will be part of the Springer Series on Augmented Vision edited by Riad Hammoud and Lawrence Wolff. We expect that you will find the workshop beneficial to you in your career and that you will enjoy the workshop as well as the overall CVPR Conference. The conference venue this year is Miami, and we trust that you will enjoy your stay in this great and culturally diverse US city as well.

We have assembled a challenging and interesting program for your enjoyment and technical edification. The very full workshop day is divided into seven topical sessions, including three invited talks by distinguished workers in this growing field. The keynote talk will be given by Prof. Mubarak Shah of the University of Central Florida, who will speak on "An Overview of Object Tracking in EO and IR Imagery". Topics of the following sessions are "Vehicle Recognition/Fusion/Laser Imagery", "Pedestrian Recognition in Far Infrared", "Target Tracking", "Background Modeling, Surveillance, and Defense", "Smart Sensors", and "Hyperspectral Image Analysis". Such a variety of topics will ensure that all attendees who work in the computer vision field will hear papers that are of interest to them and of benefit to their career. It is our hope that the paper presentations and the interaction with other participants in the overall conference and the workshop will provide the basis and impetus for you to contribute or continue to contribute to this very relevant and exciting field.

The applications of object tracking and classification are many. Military applications in target detection, tracking, discrimination, and classification are obvious. In addition to this obvious use, OTCBVS is the basis for meeting numerous security needs that arise in homeland security and industrial scenarios. A very relevant application of the science and technology discussed at this workshop is vehicle safety, based on tracking and detecting potential hazards and drivers' reactions to them. A wide variety of problems in environmental science are potentially solved by OTCBVS, including drug detection, crop health monitoring, and assessment of the effects of climate change.

OTCVBS requires processing data from many different types of sensors, including visible, infrared, far infrared, millimeter wave, microwave, radar, and synthetic aperture radar sensors. It involves the creation of new and innovative approaches to the fields of signal processing and artificial intelligence. It is a fertile area for growth in both analysis and experimentation and includes both civilian and military applications, as discussed above. The availability of ever improving computer resources and continuing improvement in sensor performance have given great impetus to this field of research. The dynamics of technology "push" and "pull" in this field of endeavor have resulted 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.

During the workshop the organizers will choose a best paper and discuss the organization of future workshops in this series. This year the prize for the best paper is an Adimec CCD camera. We urge all workshop participants to get involved in the organization of these future workshops by submitting papers of their own and by soliciting papers from colleagues working in this field.

Workshop attendees and others interested in OTCBVS are urged to visit the OTCVBS Benchmark Dataset Collection at www.cse.ohio-state.edu/otcbvs-bench/. This is a publicly available benchmark dataset for testing and evaluating novel and state-of-the-art computer vision algorithms. The benchmark contains videos and images recorded in and beyond the visible spectrum and is available for free to all researchers in the international computer vision communities. Also it will allow a large spectrum of IEEE and SPIE vision conference and workshop participants to explore the benefits of the non-visible spectrum in real-world applications, contribute to the OTCBVS workshop series, and boost this research field significantly. This benchmark website has received more than 800 hits since its inception.

As in the earlier five workshops, it has been our pleasure to organize this event, and we are grateful for your attendance. We hope that you will enjoy and benefit from the workshop and that you will participate in future years. Thanks for coming!

Katsushi Ikeuchi, University of Tokyo
Chair

Riad I. Hammoud, Delphi Electronics and Safety
Guoliang Fan, Oklahoma State University
Robert W. McMillan, US Army Space and Missile Defense Command
Technical Program Chairs