Welcome Message from the Chairs

WElcome to the third Annual meeting of IEEE Int'l Workshop series on *Object Tracking and Classification in and Beyond the Visible Spectrum (OTCBVS)*. Since 2004, this successful series is organized in conjunction with the prestigious IEEE Conference on Computer Vision and Pattern Recognition. This series is specialized in sub-areas of machine vision such as target detection, tracking, recognition, and classification *beyond the visible spectrum*. The first two meetings took place in Washington DC and San Diego, CA. This third meeting builds on the successes of the past two meetings and the quality of the journal papers on OTCBVS topics that will be published soon in the special issues of Springer Int'l Journal of Computer Vision (IJCV) and Elseiver Computer Vision and Image Understanding (CVIU). On behalf of our sponsors, *IEEE* and *Delphi Corporation*, it is our pleasure to welcome you to this exciting meeting. We believe that your attendance will be a meaningful experience for you and that you will glean some information from the workshop talks that will be of benefit to you in your work and in your career in general.

OTCBVS highlights the area of beyond the visible spectrum that involves deep theoretical research and presents a suitable framework for building solid application-oriented vision based systems. OTCBVS requires processing data from many different types of sensors, including 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. 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.

For this third meeting we have provided a publicly available benchmark for testing and evaluating computer vision algorithms with images recorded in and beyond the visible spectrum. Previously, the benchmark contained a dataset of thermal surveillance imagery of pedestrians and a dataset of thermal and visible face images under variable illuminations, expressions, and poses. Recently, a dataset of registered color and thermal surveillance imagery and several thermal datasets of human faces, pedestrians, and weapons discharging have been contributed. There has been a wide response to the benchmark, with over 200 registrations/downloads to date. We invite further contributions to this benchmark collection.

The international Program Committee of this workshop has chosen an eclectic blend of papers from the international OTCBVS community. The program consists of seventeen contributed papers, and the presentation of our keynote speaker, Prof Lawrence B. Wolff, on *"Making The Most of Multi-Modal Image Fusion"*. The fact that numerous papers were submitted is evidence of the increasing interest in this field. Oral session topics include *Multi-Modal Multi-Sensory Recognition*, *Adaptive Target Tracking*, *Moving Object Detection*, *Multi-Modal Tracking and Surveillance Applications*, and *Fusion and Invariance*. At the conclusion of the workshop the organizers will make some announcements including the selection of the best paper, and will discuss the organization of future workshops in this series. We urge all workshop participants to get involved in the organization by submitting papers of their own and by soliciting papers from colleagues working in this field.

We want to acknowledge the people who have contributed their indispensable help in organizing and supporting this event. Our thanks go first to the program committee members for their careful peer evaluations. The paper submissions and reviews were done on-line through a password-protected system using the free myreview software `http://myreview.lri.fr/`. We thank Ohio State University for hosting the website and benchmark of OTCBVS. The reviewing process followed the standard guidelines of IEEE. We would like to thank also all organizers of IEEE CVPR'06 and in particular, Chuck Stewart, for giving our community the opportunity to organize OTCBVS'06 in conjunction with their conference. Our final thanks go to Delphi Corporation for supporting this event and offering recognition for the workshop best paper and keynote speaker.

It has been our pleasure to organize this workshop, and we are grateful for your attendance and for the authors for making OTCBVS 2006 a high-quality program. We believe that this workshop will be a very exciting event of CVPR 2006, with a unique keynote talk and interesting presentations, and it will meet your expectation. Welcome to New York, and enjoy the OTCBVS presentations!

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