

Joint IEEE Workshop on Object Tracking and Classification Beyond the Visible Spectrum ¹ (OTCBVS' 04)

Washington DC, USA

July 02, 2004

Sponsors: Delphi & IEEE

Final Program

Opening session

- 8:30-8:40** Chairman's opening remarks:
Riad Hammoud, *Delphi Electronics and Safety*, and
Robert McMillan, *US Army Space & Missile Defense Command*
- 8:45-9:45** Keynote Speaker: Polarimetric Object Classification,
Firooz Sadjadi, *Lockheed Martin Corporation*
- 9:45-10:00** Coffee break

Session I: Object Detection and Tracking Beyond the Visible Spectrum

- 10:00-10:20** Robust Background-Subtraction for Person Detection in Thermal Imagery, **James W. Davis and Vinay Sharma**, *Ohio State U, Columbus, OH, USA*
- 10:20-10:40** Motion Detection Based on Local Variation of Spatiotemporal Texture, **Longin Jan Latecki, Roland Mieziako, Dragoljub Pokrajac**, *Temple University, Philadelphia, and Delaware State University, Dover, DE, USA*
- 10:40-11:00** Pedestrian Detection and Tracking in Far Infrared Images, **Masahiro Yasuno, Noboru Yasuda, Masayoshi Aoki**, *Seikei University, Japan*
- 11:00-11:20** Hyperspectral Target Detection Using Kernel Spectral Matched Filter, **Heesung Kwon and Nasser M. Nasrabadi**, *U.S. Army Research Laboratory, Adelphi, MD, USA*
- 11:20-11:30** Coffee break

Session II: Object Classification in the Infrared Spectrum

- 11:30-11:50** Disparity Based Image Segmentation For Occupant Classification, **Henry Kong, Qin Sun, William Bauson, Stephen Kiselewich, Paul Ainslie, Riad Hammoud**, *Delphi Electronics and Safety, Kokomo, IN, USA*
- 11:50-12:10** Classifier Swarms for Human Detection in Infrared Imagery, **Yuri Owechko, Swarup Medasani, and Narayan Srinivasa**, *HRL Laboratories, Malibu, CA, USA*
- 12:10-12:30** An Efficient and Robust Human Classification Algorithm Using Finite Frequencies Probing, **Yang Ran, Isaac Weiss, Qinfen Zheng and Larry. S Davis**, *University of Maryland, College Park, MD, USA*

12:30-02:00 Lunch break - enjoy your meal!

¹In conjunction with IEEE conference on computer vision and pattern recognition, CVPR 2004

Session III: Detection, tracking and calibration in complex lighting changes

- 02:00-02:20** Specular reflection removal for human detection under aquatic environment, **Junxian Wang, How-Lung Eng, Alvin H. Kam and Wei-Yun Yau**, *Institute for Infocomm Research, Singapore*
- 02:20-02:40** Visual Tracking With Group Motion Approach, **Ali Erkin Arslan and Mbeccel Demirekler**, *Middle East Technical University, Ankara, Turkey*
- 02:40-03:00** Implicit calibration of a remote gaze tracker, **Xavier L. C. Brolly and Jeffrey B. Mulligan**, *NASA Ames Research Center, Moffett Field, CA, USA*

Session IV: Thermal Imaging Features for Robust Face Recognition

- 03:00-03:20** Face Recognition in the Thermal Infrared Spectrum, **Pradeep Buddharaju, Ioannis Pavlidis and Ioannis Kakadiaris**, *University of Houston, Texas, USA*
- 03:20-03:40** Face Recognition in the Dark, **Andrea Selinger, Diego A. Socolinsky**, *Equinox Corporation, New York, USA*
- 03:40-04:00** Fusion of Visual and Thermal Signatures with Eyeglass Removal for Robust Face Recognition, **Jingu Heo, Seong G. Kong, Bisma R. Abidi, and Mongi A. Abidi** *University of Tennessee, Knoxville, TN, USA*
- 04:00-04:15** Coffee break

Session V: Sensor Fusion for Robust Object Modeling and Tracking

- 04:20-04:40** Moving Humans Detection Based on Multi-modal Sensor Fusion, **Bir Bhanu and Xiaotao Zou**, *University of California, Riverside, CA, USA*
- 04:40-05:00** Detection and Tracking of Moving Objects from Overlapping EO and IR Sensors, **Jinman Kang, Kalpitkumar Gajera, Isaac Cohen and Gerard Medioni** *University of Southern California, LA, CA, USA*
- 05:00-05:20** Fusion of Visual and Ultrasonic Information for Environmental Modelling, **Christopher Town**, *University of Cambridge, Cambridge, UK*

Closing session: Announcement and planing – 5:20- ...

Evaluation: Best paper, organization, program, etc.

Next OTCBVS : Location, PC, public IR database, ... get involved !!