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

Washington DC, USA **July 02, 2004** **Sponsors: Delphi Corp & IEEE**

OTCBVS 04's Preliminary Program [2]

Opening session

8:00-8:15 Chairman's Opening remarks: Riad Hammoud (*Delphi Automotive Systems*) **and Robert McMillan** (*US Army Space & Missile Defense Command*)

8:15-9:15 Keynote speaker: Dr. **Firooz Sadjadi,** *Lockheed Martin Corp.*

9:15-9:30 Coffee break

Session I: Object Detection and Tracking Beyond the Visible Spectrum

Chair: Prof

09:30-09:50 Robust Background-Subtraction for Person Detection in Thermal Imagery, **James W. Davis and Vinay Sharma,** *Ohio State U, Columbus, OH, USA*

09:50-10:10 Motion Detection Based on Local Variation of Spatiotemporal Texture, **Longin Jan Latecki, Roland Miezianko, Dragoljub Pokrajac,** *Temple University, Philadelphia, and Delaware State University, Dover, DE, USA*

10:10-10:30 Pedestrian Detection and Tracking in Far Infrared Images, **Masahiro Yasuno, Noboru Yasuda,Masayoshi Aoki,** *University to Tokyo, Japan*

10:30-10:50 Hyperspectral Target Detection Using Kernel Spectral Matched Filter, **Heesung Kwon and Nasser M. Nasrabadi,** *U.S. Army Research Laboratory, Adelphi, MD, USA*

10:50-11:00 Coffee break

Session II: Object Classification in the Infrared Spectrum

Chair: Prof

11:00-11:20 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*

11:20-11:40 Classifier Swarms for Human Detection in Infrared Imagery, **Yuri Owechko, Swarup Medasani, and Narayan Srinivasa,** *HRL Laboratories, Malibu, CA, USA*

11:40:12:00 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*

12:00-01:30 Lunch break - enjoy your meal!

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

[2] Address please your remarks to Riad Hammoud @ *riad.hammoud@delphi.com*

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

Chair: Prof

01:30-01:50 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*

01:50-02:10 Visual Tracking With Group Motion Approach, **Ali Erkin Arslan and Mbeccel Demirekler,** *Middle East Technical University, Ankara, Turkey*

02:10-02:30 Implicit calibration of a remote gaze tracker **Xavier L. C. Brolly and Jeffrey B. Mulligan,** *NASA Ames Research Center, Moffett Field, CA, USA*

02:30-02:40 Coffee break

Session IV: Thermal Imaging Features for Robust Face Recognition

Chair: Prof

02:40-03:00 Face Recognition in the Thermal Infrared Spectrum, **Pradeep Buddharaju, Ioannis Pavlidis and Ioannis Kakadiaris,** *University of Houston, Texas, USA*

03:00-03:20 Face Recognition in the Dark, **Andrea Selinger, Diego A. Socolinsky,** *Equinox Corporation, New York, USA*

03:20-03:40 Fusion of Visual and Thermal Signatures with Eyeglass Removal for Robust Face Recognition, **Jingu Heo, Seong G. Kong, Besma R. Abidi, and Mongi A. Abidi** *University of Tennessee, Knoxville, TN, USA*

03:40-04:00 Coffee break

Session V: Sensor Fusion for Robust Object Modeling and Tracking

Chair: Prof

04:00-04:20 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*

04:20-04:40 Fusion of Visual and Ultrasonic Information for Environmental Modelling, **Christopher Town,** *University of Cambridge, Cambridge, UK*

04:40-05:00 Moving Humans Detection Based on Multi-modal Sensor Fusion, **Bir Banhu and Xiaotao Zou,** *University of California, Riverside, CA, USA*

Closing session: Announcement and planing

Chair: Prof

Evaluation: Best paper, organization, etc.

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