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Gary Kamerman
Ove Steinvall
Editors

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Introduction

This conference, devoted to Electro-Optical Remote Sensing, collected over 30 contributions. The papers were distributed among the topics of active sensing, passive sensing, sensor development, and signal processing. Active sensing was also presented at other conferences in the symposium.

Among the papers on active sensing we note an interesting paper by Klein et.al, paper 998802, on real-time tracking around a corner. The paper presents a novel reconstruction algorithm based on computer graphics rendering instead of the conventional back propagation algorithms. This paper was chosen for the Best Student Paper Award. Papers on active sensing also involved automated detection and tracking on 3-D flash imagery as (Hammer et.al., IOSB) well as penetration of pyrotechnic effects with SWIR laser gated-viewing in comparison to VIS and thermal IR bands (Göhler et.al., IOSB). Other interesting papers in active imaging presented UAV detection and tracking (Christnacher et.al., ISL) and reconstruction of light-in-flight in path using photon counting techniques (Laurenzis, ISL).

The passive sensing papers presented work on high-sensitivity InAs photodiodes for mid-infrared detection (Jo Shien Ng et.al., Univ. of Sheffield) and other papers on signal processing related work. The sensor development contained papers on multiband optics (Sanghera et.al., NRL) and noncontact thermos-acoustic detection of targets embedded in dispersive media (Boyle et.al. Stanford Univ.).

The signal processing session contained papers on super-resolution in laser imaging (Laurenzis et.al., ISL and Xinwei Wang, et.al., Institute of Semiconductors). Other papers presented processing on multiband infrared sensors imaging using texture statistics (Henrik Petersson, et.al., FOI) as well as deep sub-space mapping in hyperspectral imaging (Wadströmer et.al., FOI).

The above papers are just examples and for other papers we refer to the conference proceedings.

**Gary Kamerman
Ove Steinvall**