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Infrared Imaging Systems: Design, Analysis, Modeling, and Testing XXIX

Gerald C. Holst
Keith A. Krapels
Editors

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Introduction

This is the 29th year for our conference, Infrared Imaging Systems: Design, Analysis, Modeling, and Testing. Over the years, we have witnessed the creation of IR focal plane arrays, IR scene projectors, MTF measurement techniques, and the Night Vision Integrated Performance Model (NVIPM). As government and private industry interests change, our conference has swings in the number of papers presented and attendees. It is interesting to note the most popular topics: A whole bunch of people come in to listen to a particular paper and then they leave after the paper.

From time to time, we have joint sessions with other conferences. This year, we teamed up with the Long-Range Imaging III conference chaired by Eric Kelmelis. Papers submitted to Eric's conference will appear in *Proceedings of SPIE* Volume 10650.

In 2016, our conference committee created two BEST PAPER awards. One is based upon the presentation (selected by the conference committee) and the other the most downloaded in the first 3 months after publication. The most downloaded paper represents the current hot topic. We recommend readers review these outstanding papers.

We are proud to recognize:

2016
Best presentation
David P. Haefner, Brian P. Teaney, and Bradley L. Preece, "Modeling demosaicing of color corrected cameras in the NV-IPM," *Proceedings of SPIE* Volume 9820, paper 982009 (2016)

Most downloaded paper (first 3 months after publication)
Daniel Wegner and Endre Repasi, "Image based performance analysis of thermal imagers," *Proceedings of SPIE* Volume 9820, paper 982016. (2016).

2017
Best presentation
Austin A. Richards and Martin Hübner, "A new radiometric unit of measure to characterize SWIR illumination," *Proceedings of SPIE* Volume 10178, paper 101780C (2017).

Most downloaded paper (first 3 months after publication)
McKenna R. Lovejoy and Mark A. Wickert, "Testing of next-generation nonlinear calibration based non-uniformity correction techniques using SWIR devices." *Proceedings of SPIE* Volume 10178, paper 1017803 (2017).

2018

Best presentation

David P. Haefner, "MTF measurements, identifying bias, and estimating uncertainty" *Proceedings of SPIE* Volume 10625, paper *1062506 (2018)*.

Most downloaded paper (first 3 months after publication)

Robert Nicholas, Ronald Driggers, David Shelton and Orges Furxhi, "Infrared search and track performance estimates for detection of commercial unmanned aerial vehicles," *Proceedings of SPIE* Volume 10625, paper 106250Y (2018).

Thank you to all who presented, the attendees, and our excellent conference committee.

Gerald C. Holst
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