

PROCEEDINGS OF SPIE

Sensors and Systems for Space Applications X

Khanh D. Pham
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Editors

10–11 April 2017
Anaheim, California, United States

Sponsored and Published by
SPIE

Volume 10196

Proceedings of SPIE 0277-786X, V. 10196

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

Sensors and Systems for Space Applications X, edited by Khanh D. Pham, Genshe Chen,
Proc. of SPIE Vol. 10196, 1019601 · © 2017 SPIE · CCC code: 0277-786X/17/\$18
doi: 10.1117/12.2281263

Proc. of SPIE Vol. 10196 1019601-1

The papers in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. Additional papers and presentation recordings may be available online in the SPIE Digital Library at SPIDigitalLibrary.org.

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Please use the following format to cite material from these proceedings:

Author(s), "Title of Paper," in *Sensors and Systems for Space Applications X*, edited by Khanh D. Pham, Genshe Chen, Proceedings of SPIE Vol. 10196 (SPIE, Bellingham, WA, 2017) Seven-digit Article CID Number.

ISSN: 0277-786X
ISSN: 1996-756X (electronic)

ISBN: 9781510608931
ISBN: 9781510608948 (electronic)

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA
Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445
SPIE.org

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Introduction

Our thoughts lately are on what decision support science has done to improve the qualities of space activities for knowledge discovery, economic prosperity, and national security. Along these lines, and appropriately for the conference, we are wondering what particular “emerging” decision support frameworks and processes can affect the wish list of civil and military space systems. Lo and behold, we have run across some possible technical approaches. We thank guest speaker Dr. Tien Nguyen from Aerospace Corporation for his enthusiastic efforts in organizing the feature presentations for this conference on Sensors and Systems for Space Applications X. His invited talks, “War-Gaming Application for Future Space Systems Acquisition Part 1: Program and Technical Baseline War-Gaming Modeling Approach” and “War-Gaming Application for Future Space Systems Acquisition: MATLAB Implementation of War-Gaming Acquisition Models and Simulation Results,” provided merits to foster multidisciplinary discussions that enable participants to gain an understanding of the multi-team competitive decision making issues, and suggested creative acquisition strategies that would achieve: i) affordability and flexibility; ii) acquisition time reduction; and iii) meeting space operator and user needs. So there you have it: war-gaming for emerging science and technologies will seamlessly integrate government and commercial assets into a cloud environment of program and technical baselines to enhance solution competition and cost affordability.

This year, the technical program committee has organized five technical sessions, considering all the aspects of: 1) Advanced Characterization of Space Environmental Variables for Space Situational Awareness; 2) Acquisition War-gaming for Future Space Systems; 3) Data Analytics and Decision Support for Space C2 and Satellite Operations; 4) Additive Manufacturing for Space Access; and 5) Small Satellite Design and Development. Such forums attracted the interest of government agencies, academia and industry partners.

We had the pleasure of acknowledging the authors for choosing this avenue for publication of their technical contributions that result in quality work published on the SPIE Digital Library. A very special thank you is in order for the members of our program committee and the session chairs for their tireless support making this conference another success. Many thanks are also due to SPIE staff for their invaluable help in making this all possible.

We really need new members and volunteers for the program committee, and we really do want to hear what you have to say. This includes getting help and hearing from you in technical matters as well as in other matters ranging from the way this conference is run to the presentation in this Proceeding Volume. The program committee and volunteers have got us this far, and continue to make us move forward as a comprehensive entity.

Looking ahead to 2018, we wish success to our new committee members. Many thanks for your continued interest to you, our readers.

Khanh D. Pham
Genshe Chen