

SPACOMM 2016

The Eighth International Conference on Advances in Satellite and Space Communications

RESENS 2016

The International Symposium on Advances in Remote Sensing Technologies and Computation

February 21 - 25, 2016

Lisbon, Portugal

SPACOMM 2016 Editors

Timothy Pham, Jet Propulsion Laboratory/ California Institute of Technology, USA

Kamal Harb, KFUPM, Saudi Arabia

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (4238) by International Academy, Research, and Industry Association (IARIA) Please refer to the Copyright Information page.

Printed by Curran Associates, Inc. (4238)

International Academy, Research, and Industry Association (IARIA) 412 Derby Way Wilmington, DE 19810

Phone: (408) 893-6407 Fax: (408) 527-6351

petre@iaria.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2634 Email: curran@proceedings.com Web: www.proceedings.com

Table of Contents

Industrial Wireless Sensor Networks (ISWN): Requirements and Solutions Abdullah Al-Yami, Wajih Abu-Al-Saud, Kamal Harb, and Baqer Al-Ramadan	1
The Design of Sparse and Non-sparse FIR Filters Using Linear Complementarity Problem Approach Muhammad Muzammal Naseer, Kamal Harb, and Ahmad Nuseirat	7
Measurements of UWB Propagation and Transmission for Wireless Links in Spacecrafts Miyuki Hirose and Takehiko Kobayashi	12
Mode Selection Algorithm for Advanced TOA Trilateration Techniques Sajina Pradhan and Suk-seung Hwang	18
Playback Data Analysis Utility for a LEO Satellite Dongseok Chae	23
Preliminary Design of S-AIS Payload for KOMPSAT-6 Yong-Min Lee, Jin-Ho Jo, and Byoung-Sun Lee	27
Performance Analysis of Operational Ka-band Link with Kepler Timothy Pham and Jason Liao	30
Simulation of SAR Jammer Techniques and Hardware Implementation for Point Scatterer Modelling <i>Emrah Ener</i>	36
Fast and Efficient Satellite Imagery Fusion Using DT-CWT and WZP Yonghyun Kim, Jaehong Oh, and Yongil Kim	42