2018 IEEE International Conference on Communication, Networks and Satellite (Comnetsat 2018)

Medan, Indonesia
15 – 17 November 2018

IEEE Catalog Number: CFP1831S-POD
ISBN: 978-1-5386-6718-7

Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number: CFP1831S-POD
ISBN (Print-On-Demand): 978-1-5386-6718-7
ISBN (Online): 978-1-5386-6717-0

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) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Title Page

Welcome Message from the Rector of Universitas Sumatera Utara

Welcome Message from the General Chair

Welcom Message from the IEEE Indonesia Advisory Board

COMNETSAT Committee

Program Schedule

Keynote Sessions

Keynote #1
BestGo Resource Allocations for Quantum-cloud-computing Services and MIMO Communications with Blockchain and Big Data
Prof. Wanyang Dai

Keynote #2
Indonesia Broadband Frequency Roadmap
Dr. Ir. Mohammad Ridwan Effendi, MA.Sc.

Keynote #3
Radio-Friendly Building for Efficient Signal Distribution
Suherman, Ph.D

Tutorial Sessions

Filtering Spam Text Messages by Using Twitter-LDA Algorithm 1
Dani Gunawan, Romi Fadillah Rahmat, Arsandi Putra, Muhammad Fermi Pasha

Autonomous Unmanned Solar Powered HAPS: Impact of Latitude and Seasons on Communications Coverage 7
Ogbonnaya Anicho, Philip B Charlesworth, Gurvinder Baicher and Atulya Nagar

Design and Realization of Biquad Microstrip Antenna at 2.4 GHz Frequency for WLAN 13
Arman Sani, Ali Syah Sukri, Naemah Mubarakah, M. Razali

Indonesia Satellite Supply Profile based on ITU Filings Year 2017-2035 18
Anna C. Situmorang, Dadang Gunawan

RAPID TIMEER: An Alternative Solution for Post-Disaster Rapid Assessment 24
Udrekh, Agustan, Swasetyo Yulianto, Oni Bibin Bintoro

V2V Mobility Modeling and Simulation Using PBC Messages for Traffic Congestion Mitigation 28
Afdhal Afdhal, Ahmadiar Ahmadiar, Nasaruddin Nasaruddin

Optical OFDM (O-OFDM) for Intensity Modulated/Direct Detection Optical Systems 34
Adil El Kabli, Moulay Ahmed Faqihi

Impact of Rayleigh and Rician Fading Environments to the Performance of Cooperative Device-to-Device 39
Nasaruddin Nasaruddin, Isyatur Raziah, Afdhal Afdhal

Resource Description Framework Generation for Tropical Disease Using Web Scraping 44
Amalia Amalia, Rizky Maulidya Afifa, Herriyance Herriyance

Hybrid Cryptosystem for Image Security by Using Hill Cipher 4x4 and ElGamal Elliptic Curve Algorithm 49
Dian Rachmawati, Mohammad Andri Budiman, Muhammad Ishan Wardhono

Intrusion Prevention System Against Denial of Service Attacks Using Genetic Algorithm 55
Baihaqi Siregar, Riverta Fierre Dwiputra Purba, Seniman, Fahmi Fahmi

Radio-Friendly Building for Efficient Signal Distribution 60
Suherman, Fahmi, Waleed Al-Azzawi, Marwan Al-Akaidi, Emerson P. Sinulingga, Naemah Mubarakah