ICSNC 2019

The Fourteenth International Conference on Systems and Networks Communications

November 24 - 28, 2019

Valencia, Spain

ICSNC 2019 Editors

Eugen Borcoci, University Politehnica of Bucarest, Romania

Jorge Cobb, The University of Texas at Dallas, USA

Lina Alfantoukh, King Faisal Specialist Hospital and Research Center, Riyadh, 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© (2019) by International Academy, Research, and Industry Association (IARIA)
Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2020)

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: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

From Modelling to Designing: Streaming Network for Multi Tenant Digital Twin Platforms 1
Christoph Schranz, Mathias Schmoigl, and Felix Strohmeier

Stabilizing Voronoi Diagrams for Sensor Networks 7
Jorge Cobb

Delay Optimization for URLLC in Software Defined Networks: A Case Study on Platooning 17
Muge Erel-Ozcevik, Berk Canberk, Cagri Gungor, and Yesim Bayramli

Genetic Algorithm for Time-Effective IoT Service Function Placement 23
Arvind Kalyan

Multiple Conditions-aware Dynamic Switch Migration in SDN Large Area Networks 28
Eugen Borcoci, Silviu - Gabriel Topoloi, and Serban Georgica Obreja

DCM+ for Enhancing Performance in Mobile and Wireless Networks 37
Rushdi Hamamreh and Derar Khader

Basic Concepts of Buried Wireless Sensor under Ballasted Layer 43
Nagateru Iwasawa, Satoko Ryuo, Koki Iwamoto, Nariya Iwaki, Akio Hada, and Akiko Kono

Performance Measuring Test Results of 920MHz Band Wireless Sensor Network in Buried Condition 47
Nariya Iwaki, Nagateru Iwasawa, and Satoko Ryuo

Genetic Algorithm For LoRa Transmission Parameter Selection 53
Aghiles Djoudi, Rafik Zitouni, Nawel Zangar, and Laurent George

Rating Convergence Measurement in Trust-based Multi-Stakeholder Consensus Decision-Making 55
Lina Alfantoukh and Abdullah Alzeer

A Survey in Multi-stakeholder Decision-Making based on Trust and Risk 61
Lina Alfantoukh and Maha Aleid

Blockchain-based Decentralized KYC (Know-Your-Customer) 67
Syed Azhar Hussain and Dr. Zeeshan-ul-hassan Usmani