



ICSNC 2015

The Tenth International Conference on Systems and Networks Communications

November 15 - 20, 2015

Barcelona, Spain

ICSNC 2015 Editors

Carlos Becker Westphall, University of Santa Catarina, Brazil

Eugen Borcoci, University Politehnica of Bucarest, Romania

Sathiamoorthy Manoharan, University of Auckland, New Zealand

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© (2015) by International Academy, Research, and Industry Association (IARIA)
Please refer to the Copyright Information page.

Printed by Curran Associates, Inc. (2015)

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

ICSNC 1: SECURITY SYSTEMS

Detecting Malicious Mobile Applications in Android OS	1
<i>T. Teck, T. Rui</i>	
A Two-Tiered User Feedback-based Approach for Spam Detection	12
<i>M. Feroze, Z. Baig, M. Johnstone</i>	
Supporting a Variety of Secure Services Based on MTM	18
<i>S. Yoon, Y. Jeon, J. Kim</i>	
Implementation of Netflow based Interactive Connection Traceback System	21
<i>J. Kim, I. Kim, K. Kang</i>	
Conducting and Identifying Penetration Attacks Using Linux Based Systems	27
<i>A. Carranza, G. Calle, G. Pena, J. Camacho, H. Carranza, Y. Estrella</i>	

ICSNC 2: WIRELESS NETWORKS

Adaptive Bitstream Prioritization for Dual TCP/UDP Streaming of HD Video	35
<i>A. Dhamodaran, M. Sinky, B. Lee</i>	
Jitter Analysis of LTE Traffic over MPLS Based Evolved Packet Core Network	41
<i>H. Hussien, H. Elsayed</i>	
Choosing Multicast Configuration with Forward Error Correction for Mobile Multiaccess Heterogeneous Users	47
<i>S. Boudko, W. Leister</i>	

ICSNC 3: SENSOR NETWORKS I

Classification of Node Localization Techniques in Wireless Sensor Networks	51
<i>F. Mekelleche, H. Haffaf</i>	
Development of an IoT-based System for Real Time Occupational Exposure Monitoring	57
<i>H. Fathallah, V. Lecuire, E. Rondeau, S. Calve</i>	
Fault-Tolerant Breach-Free Sensor Barriers	63
<i>J. Cobb, C. Huang</i>	
Performance Analysis of Association Procedure in IEEE 802.11ah	70
<i>P. Sthapit, S. Subedi, G. Kwon, J. Pyun</i>	

ICSNC 4: SENSOR NETWORKS II

Secure Dynamic Access Control Mechanism for Shared Wireless Sensor Networks	74
<i>D. Perera, K. Zoysa, J. Goonathillake, A. Sayakkara</i>	
CAMAW: A Clustering Algorithm for Multiple Applications in WSN	81
<i>E. Costa, L. Pirmez, C. Farias, F. Delicato</i>	
Intelligent Vehicular Security System using Sensors and GPS	90
<i>A. Zuhair, M. Ali, A. Al-Humairi</i>	
A k-Resilient Node Deployment Scheme Using an Air Vehicle in Wireless Sensor Networks	96
<i>D. Kim, S. An</i>	

ICSNC 5: MOBILE AND AD HOC NETWORKS I

Efficient Partial Decoding Algorithm for High Efficiency Video Coding	99
<i>D. Lee, J. Jeong</i>	
Categorization of Technologies used for Fingerprint-Based Indoor Localization	103
<i>M. Neto, G. Aquino Jr.</i>	
SDL Implementation of LTE UE Non-Seamless Random Access Procedure Handling	109
<i>M. Yousef, H. Elsayed, A. Zekry</i>	

ICSNC 6: MOBILE AND AD HOC NETWORKS II

Bulk Data Transfers through an Airline Delay-Tolerant Network	120
<i>C. Malliou, N. Bezirgilannidis, V. Tsaoussidis</i>	
Intelligence-based Routing for Smarter and Enhanced Opportunistic Network Operations	126
<i>B. Mokhtar, M. Mokhtar</i>	

ICSNC 7: NETWORK MANAGEMENT & RFID

An Experimental Study of RFID Adoption for Maritime Activities	133
<i>Y. Sato, A. Nishikiyama, K. Shimada, Yh. Matsuura</i>	
Comparing TCP Congestion Control Algorithms Based on Passively Collected Packet Traces.....	135
<i>T. Kato, A. Oda, C. Wu, S. Ohzahata</i>	
Middleware Architectures for RFID Systems: A Survey	142
<i>H. Hamza, M. Maher, S. Alaa</i>	
A Novel Path Computing Framework under QoS Constraints Based on N&PV Functions Embedding.....	150
<i>X. Hesselbach, J. Botero, J. Amazonas</i>	
Author Index	