2021 Communication and Information Technologies (KIT 2021)

Vysoke Tatry, Slovakia
13 – 15 October 2021

IEEE

IEEE Catalog Number: CFP21M13-POD
ISBN: 978-1-6654-2881-1

Copyright © 2021 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:	CFP21M13-POD
ISBN (Print-On-Demand):	978-1-6654-2881-1
ISBN (Online):	978-1-6654-2880-4

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

Content

Modelling and Production Design of Lithophanes Showing the Sparkling Effect 6
(Roman Ďurikovič, Sabína Fačkovcová)

Data Loading and Migration Methods in the Cloud Environment 13
(Michal Kvet, Karol Matiaško)

Use of Machine Learning for the Unknown Values in Database Transformation Processes 19
(Michal Kvet, Roman Čerešňák, Veronika Šalgová)

Steganography Based Approach to Image Authentication 26
(Radoslav Forgáč, Miloš Očkay, Martin Javurek)

Use of Data Mining Techniques for Network Data Analysis 32
(Július Baráth, Miroslav Líška)

DSL to Support the Process of Creating Security Documentation for Classified Systems 38
(Patrik Harnoš, Ľubomír Dedera)

FIR Filter for Feed-Forward Compensation of MEMS Actuator 44
(Zdenek Kolka, Viera Biolkova, Dalibor Biolek, Peter Barcik)

Symbolic Analysis of Networks Containing Fractional-Order Elements 48
(Dalibor Biolek, Zdeněk Kolka, Lubomír Brančík, Viera Biolková, Zdeněk Biolek)

Analysis of UAV Control Signals 52
(Vaclav Platenka, Marketa Vrsecka, Jakub Novotny)

Telecommunication Services and IoT FBG Sensing Shared in PON Optical Fiber Line 57
(Gabriel Cibira)

Using a Probabilistic Model of Signal Processing in Technologies in Military Practice 62
(Radoslav Masnica, Jozef Štulrajter)

Cloud of Things Security Challenges and Solutions 67
(Andras Toth)

Cyber Security and APT Groups 73
(Ladislav Burita, Dinh Thao Le)

Overview of Cyber Threats in Central European Countries 81
(Kamil Halouzka, Ladislav Burita, Pavel Kozak)

Deploying Fake Network Devices to Obtain Sensitive User Data 87
(Miroslav Dulik)

Analysis of Cybersecurity in the Real Environment 92
(Martin Droppa, Marcel Harakaľ)

A New View of Unified Communication in State Administration 99
(Petr Riedel, Zuzana Vranova, Antonin Mazalek)

Concept of Solution for Cyber Common Operational Picture Gaining 104
(Aneta Coufalíková, Ivo Klaban, Tomáš Šlajs, Alexandr Štefek)

Command Support System in the Cyberspace of the Contemporary Battlefield. Selected organisational, functional, as well as hardware and software aspects 108
(Grzegorz Pilarski, Maciej Marczyk)

Possibilities of Modelling the Coordinated Maneuver of Units in Difficult Terrain Conditions 113
(Jan Nohel, Pavel Zahradnicek, Zdeněk Flasar, Luděk Rak)

Modelling the Manoeuvres of Ground Reconnaissance Elements in Urban Areas 118
(Jan Nohel, Pavel Zahradnicek, Zdeněk Flasar, Petr Stodola)

Practical Limits for Micro-Doppler Simulation Models in Digital Signal Processing 124
(Stanislava Gažovová, Jozef Perďoch, František Nebus)