

# **2017 Communication and Information Technologies (KIT 2017)**

**Vysoke Tatry, Slovakia  
4-6 October 2017**



**IEEE Catalog Number: CFP17M13-POD  
ISBN: 978-1-5386-2919-2**

**Copyright © 2017, Armed Forces Academy of General Milan Rastislav Štefánik  
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:	CFP17M13-POD
ISBN (Print-On-Demand):	978-1-5386-2919-2
ISBN (Online):	978-80-8040-550-2

**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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## Content

Critical infrastructure protection – Information security (Lubomír ALMER, Petr HRŮZA)	N/A
Wideband Electronic Reconnaissance and Localization in Jamming Environment (Marián BABJAK, Ján OCHODNICKÝ, Zdeněk MATOUŠEK)	5
Optimizing Windows 10 logging to detect network security threats (Július BARÁTH)	10
A Method for Planning Military Scenarios in Military Scenario Definition Language (Marek BENČÍK, Ľubomír DEDERA)	13
New Version of SNAP Simulator (Zdenek KOLKA, Viera BIOLKOVA, Dalibor BIOLEK)	20
Communication and Information Technologies in Articles on Web of Science (Ladislav BUŘITA)	24
Fuzzy Controlled Optical Network (Gabriel CIBIRA, Miroslav ĎULÍK)	29
Contribution to Image Steganography Using Pulse Coupled Neural Networks (Radoslav FORGÁČ, Roman KRAKOVSKÝ)	37
Near-field Region Electromagnetic Sources Localization Model Verification (Stanislava GAŽOVOVÁ, Frantisek NEBUS)	43
How to design a method for measuring IT security in micro enterprises for IT security level measuring? (Michael HEIDENREICH)	47
Analysis of Wireless Sensor Network Structure and Life Time Affecting Factors (Aleksejs JURENOKS, Leonids NOVICKIS)	56
Analysis of Transmitter-Blocking Technique for Terrestrial FSO Links (Zdenek KOLKA, Viera BIOLKOVA, Dalibor BIOLEK)	62
Immunity of Automatic Modulation Classification algorithms against inaccurate estimation of signal parameters (Krzysztof KOSMOWSKI, Krzysztof PRAWDZIK, Grzegorz BARANOWSKI)	66
An Evaluation of output from current Java Bytecode decompilers (Jozef KOSTELANSKÝ, Lubomír DEDERA)	72
Theory of PI controller and introduction to implementation for DC motor controls (Alek LICHTMAN, Peter FUCHS)	78
SIMEX Simulation Tool - "Accident" Crisis Scenario and Crisis Management Entities' Exercise (Hana MALACHOVÁ, Alena OULEHOVÁ, Pavel KINCL)	83
Changes of focus area in educating students in Information Technology for last three decades (Maciej MARCZYK, Bartosz BIERNACIK)	90
Network security based on firewalls (Boris MATEJ, Martin DROPPA)	N/A

New Experience with Allan Variance (Miroslav MATEJČEK, Mikuláš ŠOSTRONEK)	101
Test Results of Polish SDR Narrowband Radio (Marcin WIŚNIEWSKI, Adam DOBKOWSKI, Grzegorz PATER, Robert MATYSZKIEL, Paweł KANIEWSKI, Bogusław GROCHOWINA)	105
Radar Target Tracking by Kalman and Particle Filter (Peter ROHAL, Ján OCHODNICKÝ)	111
General-purpose computing on GPU Pixel processing (Miloš OČKAY)	115
Support of information relations in the network of tactical command posts (Grzegorz PILARSKI)	N/A
OODA Loop in Command & Control Systems (Martin RÉVAY, Miroslav LÍŠKA)	127
The possibilities of using sensors as a part of Unmanned Aerial Vehicle equipment (Peter RINDZÁK)	N/A
Long Short-Term Memory Description and its Application in Text Processing (Lenka SKOVAJSOVÁ)	136
Hash function generation based on neural networks and chaotic maps (Michal TURČANÍK)	140
Modeling of Signal Processing from Sensors in a Probabilistic Model in a Network-Oriented Environment (Radoslav MASNICA, Jozef ŠTULRAJTER)	145
The Results of Transmission Tests of Polish Broadband SDR Radios (Robert MATYSZKIEL, Paweł KANIEWSKI, Rafał POLAK, Dariusz LASKOWSKI)	150