

WEDNESDAY October 9, 2019

07:00 – 08:00	Breakfast
08:00 – 09:30	Registration of the participants
09:30 – 09:50	◆ Opening of the Conference
09:50 – 10:20	◆ Conference partner presentation - <i>SophistIT</i>
10:20 – 10:40	Coffee break
10:40 – 12:00	Talks in sessions:
	◆ <u>Information Systems and Information Processing I</u>
12:00 – 13:20	Lunch
13:20 – 13:50	◆ Conference partner presentation - <i>Microsoft</i>
13:50 – 15:10	Talks in sessions:
	◆ <u>Communication Technologies and Signal Processing I</u>
15:10 – 15:30	Coffee break
15:30 – 16:30	Talks in sessions:
	◆ <u>Communication Technologies and Signal Processing II</u>
16:30 – 18:00	Talks in sessions:
	◆ <u>Technical Session</u>
18:00	Dinner
	Talks in sessions:

◆ Information Technologies and Information Processing I

Chairperson: Michal TURČANIK

10:40 - 11:00	Processing of RGB and Multi-spectral Data for Geographic Information System Needs (Roman ĐURIKOVIČ, Pavol KUNOVSKY)
11:00 - 11:20	Fuzzy Inference System Application on High Level Security Model (Martin OBERT, Marcel HARAKAL)
11:20 - 11:40	Information Analysis on Facebook (Ladislav BURITA)
11:40 - 12:00	An extended hierarchical system to optimise traffic crossroads control (Jakub GAJ, Bogdan WALEK, Martin KOTYRBA, Radim FARANA)

◆ Communication Technologies and Signal Processing I

Chairperson: Marcel HARAKAL

13:50 - 14:10	Smoothing Technique for Simulation of Switched-Capacitor Filters Using General-Purpose Circuit Simulation Programs (Dalibor BIOLEK, Andrew V. THOMPSON, Zdenek KOLKA, Viera BIOLKOVA)
14:10 - 14:30	Study of Solid-State Photomultiplier for Ranging Applications (Zdenek KOLKA, Viera BIOLKOVA, Otakar WILFERT, Dalibor BIOLEK, Michal KUBICEK)
14:30 - 14:50	Selected Problems for Implementation of Broadband Radio Connectivity in the Field of HF (Robert MATYSZKIEL, Marcin Rymon LIPINSKI, Bogusław GROCHOWINA, Adam DOBKOWSKI, Jarosław STEPIEN)
14:50 - 15:10	Frequency Re-usage in Radio Planning Systems (Krzysztof KOSMOWSKI)

◆ Communication Technologies and Signal Processing II

Chairperson: Marián BABJAK

15:30 - 15:50	Application of Optical/Radio Hybrid Communication in Marine Operation (Robert MATYSZKIEL, Janusz MIKOLAJCZYK, Dariusz SZABRA, Bogusław GROCHOWINA, Zbigniew BIELECKI)
15:50 - 16:10	Using Modeling of Signal Processing for Optimizing the Network Architecture in the Network Oriented Environment (Radoslav MASNICA, Jozef ŠTULRAJTER)
16:10 - 16:30	The Transfer of Hidden Information in Data in the AMR-WB Codec (Václav PLATENKA, Antonín MAZÁLEK, Zuzana VRÁNOVÁ)

◆ Technical Session

Chairperson:

16:30 - 18:00 Discussion on current problems and trends in ICT within Armed Forces.

THURSDAY October 10, 2019

07:00 - 08:00	Breakfast
08:00 - 08:30	◆ Conference partner presentation - <i>HP</i>
08:30 - 09:50	Talks in sessions:
	◆ <u>Information Technologies and Information Processing II</u>
09:50 - 10:10	Coffee break
10:10 - 10:40	◆ Conference partner presentation - <i>Lynx</i>
10:40 - 12:00	Talks in sessions:
	◆ <u>Communication Technologies and Signal Processing III</u>
12:00 - 13:30	Lunch
14:00 - 18:00	Sport and recreational activities – individual or organized
19:00	◆ Reception
	Talks in sessions:

◆ Information Technologies and Information Processing II

Chairperson: Július BARÁTH

08:30 - 08:50	Custom Virtual Machine Implementation and its Influence on Executable Static Properties (Jozef KOSTELANSKÝ, Lubomír DEDERA)
08:50 - 09:10	Recording of Data Monitoring Access to Databases using Triggers (Lubomír SEMANČÍK)
09:10 - 09:30	Target Tracking Based on Particle and Kalman Filter Combined with Neural Network (Peter ROHAL, Ján OCHODNICKÝ)
09:30 - 09:50	Estimation of Link Stability for Ad-hoc Routing Algorithms (Rafal BRYŚ, Marek SUCHANSKI)

◆ Communication Technologies and Signal Processing III

Chairperson: Miroslav ĎULÍK

10:40 - 11:00	Localization of Transmitters in VHF Band Based on the Radio Environment Maps Concept (Paweł KANIEWSKI, Edward GOLAN)
11:00 - 11:20	Radio Environment Maps for Military Cognitive Networks: Analysis of Measurement-based Maps for UHF Band (Janusz ROMANIK, Krzysztof ZUBEL)
11:20 - 11:40	A Simulation of DVB-S2 System in Fading Channels (Hung Nguyen MANH, Marie RICHTEROVÁ, Markéta VRŠECKÁ)
11:40 - 12:00	Automatic Modulation Classification for DVB-S2 System in Fading Channels (Hung Nguyen MANH, Marie RICHTEROVÁ, Markéta VRŠECKÁ)

FRIDAY October 11, 2019

07:00 - 08:00	Breakfast
08:40 - 10:20	Talks in sessions:
	◆ <u>Information Technologies and Cybersecurity</u>
10:20 - 10:40	Coffee break
10:40 - 11:40	Talks in sessions:
	◆ <u>Information and Communication Technologies in the Armed Forces</u>
11:40 - 12:00	◆ <u>Ph.D.Prize+Closing of the Conference</u>
12:00	Lunch

Talks in sessions:

◆ Information Technologies and Cybersecurity

Chairperson: Ľubomír DEDERA

08:40 - 09:00	Network Behavior Analysis of Selected Operating Systems (Július BARÁTH)
09:00 - 09:20	Contribution to Symmetric Cryptography by Convolutional Neural Networks (Miloš OČKAY, Radoslav FORGÁČ)
09:20 - 09:40	Impact of Pulse Coupled Neural Network Parameters on Image Steganography (Radoslav FORGÁČ, Miloš OČKAY, Roman KRAKOVSKÝ)
09:40 - 10:00	Model of Encryption System with Genetic Algorithm (Martin JAVUREK, Michal TURČANÍK, Boris MATEJ)
10:00 - 10:20	Network attack using TCP protocol for performing DoS and DDoS attacks (Miroslav ĎULÍK, jr.)

◆ Information and Communication Technologies in the Armed Forces

Chairperson: Jozef ŠTULRAJTER

10:40 - 11:00	Emulating of Polyphase Coded Radar Signals using Software Defined Radio (Jozef PERĎOCH, Zdeněk MATOUŠEK, Ján OCHODNICKÝ)
11:00 - 11:20	The Missile Model with Accelerometric Feedback (Miroslav MATEJČEK, Mikuláš ŠOSTRONEK)
11:20 - 11:40	Natural Semantics of Battle Management Languages (Marek BENČÍK, Ľubomír DEDERA)

Conference Partners



Communication and Information Technologies

Conference Program



10th International Scientific Conference

October 9th - 11th, 2019 - Hotel Granit Vysoké Tatry

<http://kit.aos.sk>



Organizers reserve rights to modify program schedule.