NTSP 2022 Conference Program

Organizers

Advertising partners

Partners

Radioengineering

Proceedings of Czech and Slovak Technical Universities

	12. 10. 2022	**Time**
	Registration	**08:00-10:00**
	Morning coffee	**09:00-10:00**
	Opening speeches and organizing instructions	10:00-10:20
	Session 1: Applied Electronics, *Chairman: Ján KURTY*	
1	***Implementation of True Current Amplifiers via Commercial Integrated Circuits*** Viera Biolkova, Dalibor Biolek, Zdenek Kolka	10:20
2	***Comparison of Various 4K Camera Systems for Photogrammetric Modeling*** Adam Štech, Robert Hudec, Patrik Kamencay	10:40
3	***Influence of the Low-Pass Filter Order to the Attenuation Deviation at the High Frequencies*** Bohumil Brtník, David Matoušek	11:00
4	***New Concept of Analogue Adaptive Filter Based on Fully Analogue Artificial Neural Network*** Filip Paulů, Jiří Hospodka	11:20
5	***Low-Pass Filter Design with Microcontroller*** Miroslav Matejček, Mikuláš Šostronek	11:40
	The conference advertising partner presentation: (Aliter Technologies, a.s.) **Mobile Command Post (MCP)** Haramia Ákos	12:00
	Lunch	**12:40-14:00**
	Session 2: Signal Processing, *Chairman: František NEBUS*	
6	***Contrast Quality Measure: Full-Reference Image Quality Assessment Metric for Infrared Images*** Nenad Stojanović, Boban Bondžulić, Boban Pavlović, Vladimir Ristić	14:00
7	***Classification of Interfering Elements in the Meteorological Images by Deep Neural Networks*** Lukáš Urbaník, Lukáš Ivica, Radoslav Forgáč, Miloš Očkay, Irina Malkin Ondík	14:20
8	***Generating Data Matrices on Pulse Radar Phase Detector Output*** Jozef Perďoch, Zdeněk Matoušek, Miroslav Pacek, Stanislava Gažovová, Ján Ochodnický	14:40
9	***Software Tool for Pronunciation Training of Specific English Terminology*** Jan Malucha	15:00
	Coffee break	**15:20-15:40**
	Session 3: Microwave Engineering and Signal Processing in Military Applications, *Chairman: Mikuláš ŠOSTRONEK*	
10	***Use of 3D Printing for Sierpinski Fractal Antenna Manufacturing*** Marie Richterova, Jana Olivova, Miroslav Popela, Vaclav Blazek	15:40
11	***Analysis of Communication Protocols of UAV Control Sets*** Pavel Kozak, Vaclav Platenka, Marketa Vrsecka	16:00
12	***CFAR Algorithm for Improving Detections on Radar Raw Data Matrices*** Jozef Perďoch, Stanislava Gažovová, Miroslav Pacek, Zdeněk Matoušek, Ján Ochodnický	16:20
13	***Suboptimal Sequences for Binary Encoding of Radar Signals*** Stanislava Gažovová, Marián Babjak	16:40
	Dinner	**17:00-20:00**

	13. 10. 2022	Time
	Registration	**08:00-09:00**
	Morning coffee	**08:00-09:00**
	Session 4: Communication Engineering, *Chairman: Marián BABJAK*	
1	***Investigation of the Potential Influence of Wind Farms on the VHF Tactical Links Performance*** Janusz Romanik, Paweł Kaniewski, Krzysztof Zubel, Edward Golan, Piotr Grądzki	09:00
2	***Analysis of NLOS Channel Properties of Terrestrial FSO Links*** Zdenek Kolka, Viera Biolkova, Dalibor Biolek, Peter Barcik	09:20
3	***Simulation and Measurement of Optical Networks 10 and 100 Gb/s*** Milan Cucka, David Grenar, Jakub Frolka, Jiri Vavra, Karel Slavicek, Martin Kyselak	09:40
4	***Experimental Results for Indoor Position Estimation with TDOA Method*** Stanislava Gažovová, František Nebus	10:00
5	***Evaluation of the Cost-Effective Indoor Wireless Positioning System Using RSSI Method*** Stanislav Drozd, Juraj Tomlain, Martin Marko, Ondrej Teren, Jan Tomlain	10:20
	Coffee break	**10:40-11:00**
	Session 5: Informatics, *Chairman: Roman BEREŠÍK*	
6	***Intrusion Detection by Artificial Neural Networks*** Michal Turčaník, Július Baráth	11:00
7	***Lock Tracking – Efficient Solution for Relational Transaction Locking*** Michal Kvet	11:20
	The conference advertising partner presentation:* (R-SyS, s.r.o.)** ***Signal Processing in the FMCW Radar Hrnčár Martin	11:40
	Lunch	**12:20-14:00**
	Session 6: Informatics, *Chairman: Július BARÁTH*	
8	***Astronomical Objects Classification by Convolutional Neural Network Algorithms Layers*** Daniel Kyselica, Linda Jurkasová, Roman Ďurikovič, Jiří Šilha	14:00
9	***Malware Signatures Detection with Neural Networks*** Matej Adamec, Michal Turčaník	14:20
10	***The Human Interface Device Attack from the Perspective of the Attacker and the Forensic Analyst*** Sebastián Potocký, Jozef Štulrajter	14:40
	Conference Banquet - NTSP 2022 PhD Student Prize Award, Closing of the Conference	**18:00**

14. 10. 2022 (Post Conference Day)

Outdoor activities in vicinity of the Demänovská Dolina and West Tatras
Warm cloths, waterproof jacket and outdoor boots are highly recommended.