### **ORGANIZED BY**

#### **Ukrainian Section IEEE**

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#### **Technical Co-Sponsorship**

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### **CONFERENCE TIMELINE**

	9:00 - 17:00	Registration (Hall of Synergy)
	9:45 - 10:00	Conference Opening
	10:00 - 11:00	Conference Plenary Session
	11:00 - 11:15	Coffee Break
	11:15 - 12:15	Regular Session 1: Infocommunication Technologies and Networks
October 6	12:15 - 12:30	Coffee Break
Tuesday	12:30 - 13:30	Regular Session 2: Infocommunication Technologies and Services
(Onsite)	13:30 - 14:15	Lunch
		Regular Session 3: Infocommunication technologies, networks and
	14:15 - 15:30	services (IoT)
	15:30 - 15:45	Coffee Break
	15:45 - 17:00	Regular Session 4: Theoretical and Practical Aspects of Al & AR
	17:30	Gala Dinner
	9:30 - 11:00	Regular Session 1: Mobile infocommunication systems and signal processing
	11:00 - 11:15	Coffee Break
October 7	11:15 - 12:15	Regular Session 2: Radars
Wednesday	12:15 - 12:30	Coffee Break
(Onsite)	12:30 - 13:30	Regular Session 3: Theoretical and Practical Aspects of Al & AR
	13:30 - 14:30	Lunch
	14:30 - 15:45	Regular Session 4: Cybersecurity
October 8 -9		Short Messages (POSTERS)
Thursday – Friday	09:30 - 15:30	, , , , , , , , , , , , , , , , , , ,
(Online)		(YouTube)
(3:)	09:30 - 10:30	Online Session 1: Infocommunication technologies and networks
	10:45 - 11:45	Online Session 2: <b>5G Heterogeneous Networks</b>
October 8		Online Session 3: Mobile infocommunication systems and signal processing
Thursday (Online)	12:00 - 13:30	Online Session 4: Cybersecurity
(Offilitie)		Online Session 5: Infocommunication technologies and services
	14:00 - 15:15	Online Session 6: Radars
	09:30 - 10:30	Online Session 1: Infocommunication technologies and networks
		Online Session 2: Control, adaptation, self-organization in infocommuni-
		cation systems
October 9	10:45 - 11:45	Online Session 3: Image Processing
Friday		Online Session 4: Cybersecurity
(Online)	12:00 - 13:15	Online Session 5: Artificial Intelligence and Recognition
	13:30 - 14:30	Reserve Online Session
	14:30 - 14:45	Conference Closing

#### CONFERENCE OPENING AND PLENARY SESSION

Conference room "Synergy" - October 06 – 9:45 – 11:00 https://meet.google.com/dth-aqfr-svi

09:00- 17:00 Registration (Reception, "Synergy", Nauka ave., 14)

#### Welcome speeches

#### **Oleksandr Martynchuk**

Use of Adaptive Polarization Processing of Signals in Perspective Mobile Communication Systems

#### **Dmitry Zaitsev**

Switching vs Routing within Multidimensional Torus Interconnect

#### Roman Odarchenko

5G Use Cases for Vertical Industries in Touristic, Safe and Mobility-Efficient Cities: Challenges and Facilities

#### **SESSION.** INFOCOMMUNICATION TECHNOLOGIES AND NETWORKS

Conference room "Synergy" - October 06 – 11:15 - 12:15 https://meet.google.com/dth-aqfr-svi

71	Oleksandr Lemeshko, Maryna Yevdokymenko, Oleksandra Yeremenko, Aymen M. K. Al-Dulaimi, Pavel Segeč and Jozef Papán	QoE-Centric Adaptive Multipath Routing under R-Factor with Load Balancing in SDN
112	Vitalii Tkachov, Anna Budko, Kateryna Hvozdetska and Daryna Hrebeniuk	Method of Building Dynamic Multi-hop VPN Chains for Ensuring Security of Terminal Access Systems
144	Nataliya Fil, Leonid Nefedov and Angela Binkovskaya	Fuzzy Model for Estimating the Probability of User Error in the Electronic Document Management System
180	Roman Odarchenko, Anastasiia Abakumova, Serhii Bondar, Yuri Bogachuk and Kundyz Maratkyzy	Advanced Method for QoE Evaluation and Improvement in Modern Cellular Networks

### SESSION. INFOCOMMUNICATION TECHNOLOGIES AND SERVICES

Conference room "Synergy" - October 06 – 12:30 - 13:30 https://meet.google.com/dth-aqfr-svi

61	Oleksandr Pliushch, Serhii Toliupa, Viktor Vyshnivskyi and Anatolii Rybydajlo	Studying of Initial Weight Vector Selection Impact on Transient Performance of Coherent Sidelobe Cancellation System with Gradient Adaptation Algorithm
	Serhii Toliupa, Liudmyla Tereikovska, Ihor Tereikovskyi, Shynar Mussiraliyeva and Kalamkas Bagitova	Deep Neural Network Model for Recognition of Speaker's Emotion
89	Oleksandr Bezsmertnyi, Nataliia Golian, Vira Golian and Iryna Afanasieva	Behavior Driven Development Approach in the Modern Quality Control Process
95	Vitaliy Lysenko and Irina Chernova	Intelligent Decision Support System in Entomophages Production

# **SESSION.** INFOCOMMUNICATION TECHNOLOGIES, NETWORKS AND SERVICES (IOT)

Conference room "Synergy" - October 06 – 14:15 – 15:30 https://meet.google.com/dth-aqfr-svi

35	Yurii Lykov, Veronika Shatalova, Anastasia Paniotova and Anna Lykova	Energy Efficiency Comparison LPWANs: LoRaWAN vs Sigfox
74	Olga Zaichenko, Marina Miroshnyk, Pavlo Galkin, Nataliia Zaichenko and Anatolii Miroshnyk	Application of Six-port for Distance Measurement
102	Pavlo Galkin, Olga Zaichenko, Ravil Umiarov, Igor Klyuchnyk, Olga Grigorieva and Iurii Khoroshaylo	Design Testbenches in IoT and IIoT Area for TATU Smart Labs
103	Pavlo Galkin	Integration approach to solve problems in design testbenches for wireless sensor network
133	Yrii Afanasiev, Volodymyr Afanasiev, Valerii Chystov, Oleksii Sitkov, Vitalii Surhai and Serhii Fediuk	Research of access control system using wireless sensor network

#### SESSION. THEORETICAL AND PRACTICAL ASPECTS OF AI & AR

Conference room "Synergy" - October 06 – 15:45 – 17:00 https:// meet.google.com/dth-aqfr-svi

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	Kyrylo Smelyakov, Danil Karachevtsev, Denis Kulemza, Yehor Samoilenko, Oleh Patlan and Anastasiya Chupryna	Effectiveness of Preprocessing Algorithms for Natural Language Processing Applications
40	Oksana Mazurova, Oleksandr Topchii, Oleksandr Samantsov and Mariya Shirokopetleva	A Study of Optimization Models for Creation of Artificial Intelligence for The Computer Game in The Tower Defense Genre
	Igor Ruban, Hennadii Khudov, Oleksandr Makoveichuk, Vladyslav Khudov, Irina Khizhnyak and Oleksii Barannik	The Mosaic Sustainable Marker Detection Method for Augmented Reality Systems
55	levgen Iosifov, Olena Iosifova and Volodymyr Sokolov	Sentence Segmentation from Unformatted Text using Language Modeling and Sequence Labeling Approaches
132	Vitalii Martovytskyi, Igor Ruban, Oleksandr Sievierinov, Andrii Nosyk and Valentyn Lebediev	Mathematical Model of User Behavior in Computer Systems

# **SESSION.** MOBILE INFOCOMMUNICATION SYSTEMS AND SIGNAL PROCESSING

Conference room "Synergy" - October 07 – 9:30 – 11:00 https://meet.google.com/dth-aqfr-svi

l	Improving the Performance of DOA Estimation with Spatial Smoothing via Noise Reduction
Konstantyn Vasiuta, Uliana Zbezhkhowska, Valeriy Slobodyanuk and Oleksandr Kovalchuk	Stealth evaluation of the OFDM communication system
Pavlo Kostenko, Valeriy Slobodyanuk, Volodymyr Vasylyshyn, Vitaliy	Design of pseudorandom discrete signals with power angle modulation and investigation of their characteristics

	Lebedev and Serhii Makarov	
45	Volodymyr Vasylyshyn	Direction of arrival estimation with ULA using SSA-based preprocessing
177	Olena Semenova, Andriy Semenov, Olha Voitsekhovska and Dmytro Kozin	The Neural Network for Vertical Handover Procedure
197	Mykola Pastushenko, Yana Krasnozheniuk and Maksym Zaika	Investigation of Informativeness and Stability of Mel-Frequency Cepstral Coefficients Estimates based on Voice Signal Phase Data of Authentication System User
36	Volodymyr Saiko, Mykola Brailovskyi, Volodymyr Nakonechnyi and Serhii Toliupa	MODELS OF IMPROVING THE EFFICIENCY OF RADIO COMMUNICATION SYSTEMS USING THE TERRAHERT RANGE

## **SESSION. RADARS**

### Conference room "Synergy" - October 07 - 11:15 - 12:15 https://meet.google.com/dth-aqfr-svi

44	Igor Koryttsev, Sergiy Sheiko, Vladimir Kartashov, Oleh Zubkov, Vladimir Oleinikov, Ivan Selieznov and Michail Anohin	Practical Aspects of Range Determination and Tracking of Small Drones by Their Video Observation
104	Igor Shubin, Stanislav Snisar and Svitlana Litvin	Categorical Analysis of Logical Networks in Application to Intelligent Radar Systems
145	Iryna Svyd, Ivan Obod, Oleksandr Maltsev and Ganna Zavolodko	Interference Immunity Assessment of a Secondary Surveillance Radar Synchronous Information Network
155	Ivan Obod, Iryna Svyd, Oleksandr Maltsev and Sviatoslav Starokozhev	The Effect of Masking Interference on the Quality of Request Signal Detection in Aircraft Responders of the Identification Friend or Foe Systems
146	Ivan Obod, Iryna Svyd, Oleksandr Maltsev, Ganna Zavolodko and Sergiy Leonov	WAM Systems: Comparative Analysis of Information Support Quality

### SESSION. THEORETICAL AND PRACTICAL ASPECTS OF AI & AR

#### Conference room "Synergy" - October 07 - 12:30 - 13:30 https://meet.google.com/dth-aqfr-svi

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	Kolisnyk Kostyantyn, Sokol Yevgen, Avrunin Oleg, Shushliapina Nataliia and Nosova Yana	Improving the Quality of Telemedicine Diagnostic Imaging in Oto- laryngology
	Alina Nechyporenko, Viktor Reshetnik, Denys Shyian, Nadiia Yurevych, Victoriia Alekseeva, Rosana Nazaryan and Vitaliy Gargin	Comparative Characteristics of the Anatomical Structures of the Ostiomeatal Complex Obtained by 3D Modeling
	Maksym Shopynskyi, Nataliia Golian and Iryna Afanasieva	Long short-term memory model appliance for generating music compositions
182	Anatolii Kargin and Tetyana Petrenko	Fuzzy Inference Considering Data Aging in Smart Rules Engine

## **SESSION.** CYBERSECURITY

### Conference room "Synergy" - October 07 - 14:30 - 15:45 https://meet.google.com/dth-aqfr-svi

	Alexandr Kuznetsov, Nikita Goncharov, Olena Maliy, Inna Horkovenko, Nikolaj Kovalenko and Tetiana Kuznetsova	Non-Binary Cryptographic Functions for Symmetric Ciphers
	Alexandr Kuznetsov, Anastasiia Kiian, Oleksii Smirnov, Olga Girzheva, Oleksandr Nakisko and Tetiana Kuznetsova	Advanced Code-Based Electronic Signature Scheme
168	Vitalii Martovytskyi, Igor Ruban, Hennadiy	Method of Detecting FDI Attacks on Smart Grid

	Lahutin, Volodymyr Rykun, Irina Ilina and Vladyslav Diachenko	
17	Serhii Semenov, Zhang Liqiang and Cao Weilin	Penetration Testing Process Mathematical Model

# **ONLINE SESSION.** INFOCOMMUNICATION TECHNOLOGIES AND NETWORKS

Google Meet - Oct. 08 - 9:30 - 10:30 https://meet.google.com/gnk-tngc-gjv

23	Bogdan Petrik, Valeriy Dubrovin, Hanna Nelasa and Yullia Tverdokhlib	Network intrusion monitoring system wavelet analysis traffic
77	Nikolai Biriukov and Nataliya Triska	A model of traffic value impact on packet delay deviation
78	Romanov Oleksandr, Volodymyr Mankivskyi and Ivan Saychenko	Analysis of Influence of UDP Parameters on QoS in IP Network
81	Victor Krasnobayev, Alexandr Kuznetsov, Alina Yanko and Tetiana Kuznetsova	Solving the Shortest Path Problem Using Integer Residual Arithmetic
172	Andriy Kovalenko, Heorhii Kuchuk, Viacheslav Radchenko and Anton Poroshenko	Predicting of Data Center cluster traffic

### **ONLINE SESSION.** 5G HETEROGENEOUS NETWORKS

Google Meet - Oct. 08 - 10:45 - 11:45 https://meet.google.com/gnk-tngc-gjv

31	Juliy Boiko, Ilya Pyatin and Oleksander Eromenko	Simulation of the Transport Channel with Polar Codes for the 5G Mobile Communication
	Andrew Bulashenko, Stepan Piltyay and Ivan Demchenko	Energy Efficiency of the D2D Direct Connection System in 5G Networks
114	Stepan Piltyay, Andrew Bulashenko and Ivan Demchenko	Wireless Sensor Network Connectivity in Heterogeneous 5G Mobile Systems
137	Serhii Siden, Dmytro Makoveyenko and Vo- lodymyr Pyliavskyi	Generalized 5G mmWave Propagation Model in an Urban Macro Environment

# **ONLINE SESSION.** MOBILE INFOCOMMUNICATION SYSTEMS AND SIGNAL PROCESSING

Google Meet - Oct. 08 – 12:00 - 13:30 https://meet.google.com/gnk-tngc-gjv

9	Gleb Avdeyenko	Generating DVB-S2 Signals by Application of Nuand BladeRF x40 SDR Transceiver
80	Stepan Piltyay, Andrew Bulashenko and Ivan Demchenko	Compact Polarizers for Satellite Information Systems
62	Volodymyr Tkachenko and Aleksandr Serkov	Method for increasing bandwidth and noise immunity IIoT at the influence of natural and intentional electromagnetic interference
100	Ivan Horbatyi	Approaches to the Construction of a Transmitting Device for Generating Signals Based on the Amplitude Modulation of Many Components
105	Andrew Bulashenko, Stepan Piltyay and Ivan Demchenko	Analytical Technique for Iris Polarizers Development
121	Taras Hurskyi, Oleg Sova and	MODELING OF JAMMING OF THE RADIO NETWORK WITH AIR REPEATER

	Serhiy Boholiy	
	Arkadiy Prodeus and Maryna Didkovska	Objective assessment of speech intelligibility in small and medium-sized classrooms

## **ONLINE SESSION.** CYBERSECURITY

Google Meet - Oct. 08 – 12:00 - 13:30 https://meet.google.com/uhq-winc-snp

6	Dmytro Progonov	Performance of statistical stegdetectors in case of small number of stego images in training set
51	Dmitry Palko, Tetiana Babenko, Larysa Myrutenko and Andrii Bigdan	Model of information security critical incident risk assessment
108	Mykhailo Klymash, Nazar Peleh, Olga Shpur and Oksana Maksysko	Concept of Intelligent Detection of DDoS Attacks in SDN Networks Using Machine Learning
163	Sergiy Gnatyuk, Maksim lavich, Giorgi lashvili and Razvan Bocu	Novel Method of Hardware Security Problems Identification
56	levgeniia Kuzminykh, Maryna Yevdokymenko and Dmytro Ageyev	Analysis of Encryption Key Management Systems: Strengths, Weaknesses, Opportunities, Threats

# **ONLINE SESSION.** INFOCOMMUNICATION TECHNOLOGIES AND SERVICES

Google Meet - Oct. 08 – 14:00 - 15:15 https://meet.google.com/gnk-tngc-gjv

	Andriy Luntovskyy, Bohdan Shubyn, Taras Maksymyuk and Mykhailo Klymash	Highly-Distributed Systems: what is inside?
	Oleg Bisikalo, Dina Chernenko, Oksana Danylchuk, Viacheslav Kovtun and Vo- lodymyr Romanenko	Information technology for TTF optimization of an information system for critical use that operates in aggressive cyber-physical space
130	Ryszard Pukala, Serhii Hlibko, Nataliya Vnu- kova and Olena Korvat	Power BI in ICT for Monitoring of Insurance Activity based on Indicators of Insurance Portfolios
139	Larysa Globa, Rina Novogrudskaya, Bohdan Zadoienko and Oleksandr Stryzhak	Ontological model for scientific institutions information representation
8	Sergiy Zagorodnyuk, Ilona Revenchuk, Bogdan Sus and Oleksandr Bauzha	Software Interaction Problem with the LDAP Directory Service: Description, Resolving, Analysis

## **ONLINE SESSION. RADARS**

Google Meet - Oct. 08 – 14:00 - 15:15 https://meet.google.com/uhq-winc-snp

128	Leonid Uryvsky and Bohdan Shmihel	Boundary parameters for a qualitative assessment of digital communication channels with specified reliability characteristics
	Mykhailo Ilchenko, Alexander Zhivkov, Roman Kamarali, Mykyta Kopaniev and Ivan Saichenko	Non-Lorentzian resonance characteristics of metamaterial cells in a waveguide
	Valery Volosyuk, Simeon Zhyla, Vladimir Pavlikov, Nikolay Ruzhentsev, Mykola Nechyporuk and Volodymyr Kosharskyi	Optimal algorithms synthesis for polarization selection of useful signals on the background of passive interference in synthetic aperture radars

	I valety volosyuk, sittleoti zityla, vladiitiii	Structure optimization of the multi-channel on-board radar with antenna aperture synthesis and algorithm for power line
186	Nechyporuk and Eduard Tserne	selection on the background of the earth surface

# **ONLINE SESSION.** INFOCOMMUNICATION TECHNOLOGIES AND NETWORKS

Google Meet - Oct. 09 - 9:30 - 10:30 https://meet.google.com/gnk-tngc-gjv

109	Tatiana Shmeleva and Alexander Kostikov	Verification of Square Lattices with Dedicated Channels by Infinite Petri Nets
113	Lev Raskin, Oksana Sira and Yurii Parfeniuk	Mathematical models and methods of multicriteria routing in the conditions of fuzzy initial data
154	Victor Tikhonov, Olena Tykhonova, Olha Yavorska and Svetlana Radkevych	THE FLOWS OPTIMIZATION OF THE TRANSPORT NET- WORK BY THE CRITERION OF MINIMAL TRANSIT
125	Irina Strelkovskaya, Irina Solovskaya and Juliya Strelkovska	Spline-extrapolation of Video Traffic of IoT-devices Based on Various Cubic Splines

# **ONLINE SESSION.** CONTROL, ADAPTATION, SELF-ORGANIZATION IN INFOCOMMUNICATION SYSTEMS

Google Meet - Oct. 09 – 10:45 - 11:45 https://meet.google.com/gnk-tngc-gjv

	Oleksandr Samoshchenko, Heorhii Marhiiev, Irina Zeleneva and Oleksandr Miroshkin	Biased Exponents Encoding With Positive Zero When Comparing Absolute Values of Floating-Point Numbers
183	Oksana Pichugina and Nadezhda Muravyova	Data Batch Processing: Modelling and Applications
	Viktor Klimenko, Denis Kotov, Diana Sadych, Juri Rafalskiy, Vitaliy Lishchenko and Yevhen Sapiehin	Model of Functioning of Information-Control System of Unmanned Car with Different Sensors Channels of Information Interaction
	Roman Yershov, Volodymyr Bychko, Yurii Gulyi and Maxim Zhydko	Automation of Anti-Race State Encoding of Asynchronous FSM for Robust Systems

### **ONLINE SESSION.** IMAGE PROCESSING

Google Meet - Oct. 09 - 10:45 - 11:45 https://meet.google.com/uhq-winc-snp

22	Oleg Gofaizen, Olena Osharovska, Mikola Patlayenko, Volodymyr Pyliavskyi, Svitlana Kiiko and Valentyna Solodka	Image Sharpness Control in Modern Television Systems
97	Volodymir Baliar, Olena Mazurkiewicz and Yurii Petryk	Influence of IP-network performance on MPEG- based OTT/IPTV video streaming
107	Baliar Volodymir, Mazurkiewicz Olena and Hryshchenko Artem	Immunity estimation of abandoned object detection video system to environmental impact
	Oleg Gofaizen, Olena Osharovska, Svitlana Kiiko, Mikola Patlayenko, Volodymyr Pyliavskyi and Valentyna Solodka	Potentially Achievable Image Definition in Video Applications

## **ONLINE SESSION. CYBERSECURITY**

Google Meet - Oct. 09 – 12:00 - 13:15 https://meet.google.com/gnk-tngc-gjv

	Oleksii Nariezhnii, Tetiana Grinenko, Maksym Trotsko and Oleksandr Kostyria	Synchronization of High-Speed Quantum Random Number Generators via Digital Television Channels
82	Victor Krasnobayev, Alexandr Kuznetsov, Alina Yanko and Tetiana Kuznetsova	The procedure for implementing the operation of multiplying two matrices using the residual number system
	Gennady Khalimov, Ibraim Didmanidze, Yevgen Kotukh, Oleksandr Sievierinov, Otar Shonia and Svitlana Khalimova	Encryption scheme based on the automorphism group of the Suzuki function field
116	Yuri Bespalov, Lyudmila Kovalchuk, Hanna Ne- lasa and Roman Oliynykov	On Generation of Cycles, Chains and Graphs of Pairing- Friendly Elliptic Curves
	Maksim Iavich, Tamari Kuchukhidze, Tetyana Okhrimenko and Serhii Dorozhynskyi	Novel Quantum Random Number Generator for Cryptographical Applications

# **ONLINE SESSION 5.** ARTIFICIAL INTELLIGENCE AND RECOGNITION

Google Meet - Oct. 09 - 12:00 - 13:15 https://meet.google.com/uhq-winc-snp

47	Andrey Klochko, Denys Chernyshev, Svitlana Terenchuk and Vitalii Zapryvoda	Using Deep Structured Semantic Model to Analysis Text Documents in the Building Normative Base
70	Serhii Leoshchenko, Oleksiy Nazarenko, Andrii Oliinyk, Sergey Subbotin, Tetiana Zaiko and Vasyl Donenko	Using neuromodels for evaluating and determining productivity of technical processes
152	Mykola Kushnir, Nelia Savchyn, Andrii Komarny- tskyi, Kateryna Tokarieva, Volodymyr Toronchuk and Petro Kroialo	Technological and legal aspects of the use of machine learning elements in chaotic information processing systems
153	Mykola Kozlenko, Ihor Lazarovych, Valerii Tkachuk and Mykola Kuz	Deep learning demodulation of amplitude noise shift keying spread spectrum signals
59	Jan Matuszewski and Tomasz Walczyna	Tracking of moving objects based on video image

# **POSTER SESSION**

**Online (YouTube), October 8 – 9** (during Oct. 8 at 9:30 – Oct. 9 at 15:30)

http://picst.org/posters\_20/

1	Tofiq Mansurov and Beytulla Guseynov	Development of Intelligent Call Service Center on NGN Networks
2	Tofiq Mansurov and Beytulla Guseynov	Mathematical Model of Functioning of Intelligent Call Service Center on NGN Networks
3	Ivan Gorbenko, Alexandr Zamula, Tri Luc Ho and Sergey Rodionov	Derived signals systems for information communication systems applications: synthesis, formation, processing and properties
4	Volodymyr Mokhor, Serhii Honchar and Alla Onyskova	Cybersecurity Risk Assessment of Information Systems of Critical Infrastructure Objects
10	Georgii Kozhevnikov, Oleh Pihnastyi and Maxim Glavchev	Input Flow Control Algorithms of the Trasnsport System
11	Viktor Zaruba and Iryna Parfentenko	Risk management models in operative planning at an industrial enterprise
12	Hanna Melnyk, Yuliya Antonova- Rafi, Igor Khudetskyy and Yevhen Snitsar	System for automatic adjustment of the volume of the receiving sleeve
13	Oleh Pihnastyi and Georgii Kozhevnikov	Control of a Conveyor Based on a Neural Network
16	Yuriy Penkin, Georgiy Khara and Alina Fedoseeva	Features of Application of HiSNeC Technology in the Multi-User Windows Environment
17	Valerii Lakhno and Liubov Plyska	Analysis of Models for Selection of Investment Strategies
19	levgen Fedorchenko, Andrii Oliinyk, Vasyl Donenko, Alexander Stepanenko, Tetiana Fedoronchak and Anastasia Kharchenko	DEVELOPMENT OF A GENETIC METHOD FOR DETERMINING THE OPTIMAL LOCATION OF POWER SUPPLY OBJECTS
20	Oleksandr Hladkyi, Sergey Rudyk, Volodymyr Kulivnuk, Tetiana Tkachenko and Tetiana Shparaga	Using of information environment model for development of enterprises' economics efficiency in industrial agglomeration
21	Victopia Bandura, Andriy Malitchuk, Nelly Lysenko and Oleksandra Lysenko	Design of a distributed mobile telecommunications system for cinemas
25	Vitaliy Lishchenko, Hennadii Khudov, Volodymyr Hnyria, Andrii Lykianchykov, Ivan Kravchenko and Kristina Tahyan	Processing of Non-coherent Signals in a Multi-Radar System Based on Two-Coordinate Surveillance Radars
26	Dmytro Kucherov, Andrei Berezkin and Serhii Perepelitsyn	Some Features of LoRa Technology under Multi-Ray Reception
30	Ivanna Dronyuk, Iryna Moyseyenko, Jerzy Kuck and Olena Gorina	Theoretical and Applied Aspects of Bank Credit Risks Minimization
34	Shreyas Mistry	A Comparative Study of XSS Attack Detection Methods and Tools
38	Mykhailo Vedernikov, Lesia Volianska-Savchuk, Maria Zelena, Natalia Bazaliyska, Valentina Litinska and Olga Baksalova	Infocommunication Paradigm of Corporate Culture Development in HR Management System

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39	Mykhailo Vedernikov, Helena Koshonko, Lesia Volianska-Savchuk, Maria Zelena, Natalia Bazaliyska and Oksana Chernushkina	Assessment of Information and Communication Support of Production Systems in the Conditions of Digital Transformation of the National Economy
43	Iryna Moiseyenko and Mariya Fleychuk	SIMULATION OF THE ENTERPRISE MANAGEMENT RISKS MONITORING
50	Stanislav Popov, Mykola Ishchenko, Liudmyla Ishchenko and Denis Kolosovskyi	EXPERT SYSTEM OF SELECTION OF COMPETITIVE OPTIONS OF SYSTEMS OF UNDERGROUND DEVELOPMENT OF ORE DEPOSITS
53	Mykhajlo Klymash, Olena Hordiichuk- Bublivska, Ihor Tchaikovskyi and Yulia Pyrih	Research of Microservices Features in Information Systems using Spring Boot
54	Nina Averianova and Tatiana Voropayeva	Information security of Ukraine: social and humanitarian aspects
57	Leonid Taraniuk, Hongzhou Qiu and Karina Taraniuk	Research of development of logistics of the China's enterprises which is based on technology of the internet of things
58	Andrii Safonyk, Olena Prysiazhniuk and Ivan Targoniy	Prediction of Industrial Wastewater Treatment From Ferromagnetic Impurities and Computer Modeling of the Impact of a Flow Velocity
60	Yuriy Rudyk, Andriy Gavriluk, Viktor Kuts and Roman Naumchuk	Required safety component of automotive cyber-physical systems
63	Roman Tsaryov and Lesya Nikityuk	Optimization of Service Platforms on the Base of Adaptation Model
64	Dmytro Makoveyenko, Olena Osharovska, Serhii Siden and Volodymyr Pyliavskyi	The Effect of Interference Evaluation between LTE Mobile Stations and McWill Technology
65	Iryna Strutynska, Lesia Dmytrotsa, Halyna Kozbur, Olha Hlado and Olena Sorokivska	Working-out of Recommendation System to Increase the Digital Maturity Level of Enterprises
68	Ruslan Politanskyi, Andriy Veryga and Maria Vistak	Analyse of scientific problems facing developers of modern telecommunication technologies
72	Baraa Salim	Design & Analyses of a Novel Real Time Kurdish Sign Language for Kurdish Text and Sound Translation System
73	Serhii Toliupa, Liudmyla Tereikovska, Ihor Tereikovskyi, Aliya Doszhanova and Zhuldyz Alimseitova	PROCEDURE FOR ADAPTING A NEURAL NETWORK TO RECOGNITION OF THE IRIS OF THE EYE
79	Irina Vasil'eva and Vladimir Lukin	Methods for predicting multichannel images classification efficiency
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159	Vadym Akhundov, Galyna Kondratenko, levgen Sidenko and Yuriy Kondratenko	Visually-Interactive Systems: Structural Optimization of Software Development
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173	Adilkhan Symagulov	Identification of criminogenic content in natural language texts
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178	Romans Dyakons, Irina Kazina and Rostislavs Kopitovs	Self-adapting algorithms of the control system
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189	Artem Moskalenko, Galina Sokol, Andrii Shuhailo and Dmitro Herasymov	Method of Synthesizing Signals of the Improved Modulation by the Cyclic Shift of Code with Adaptation by Speed of Information Transmission on the Advanced Binary Matrixe Basis
190	Yurii Kravchenko, Viktor Bondarenko, Maksym Tyshchenko, Kostiantyn Herasymenko, Oleksandr Trush and Olena Starkova	Model of Information Protection system database of the mobile terminals information system on the territory of Ukraine (ISPMTU)

191	Yurii Kravchenko, Viktor Bondarenko, Maksym Tyshchenko, Kostiantyn Herasymenko, Oleksandr Trush and Olena Starkova	An Expert System for Testing of Microcontroller Systems Designers
192	Danylo Kovalchuk, Yurii Kravchenko and Olena Starkova	Development of recommendations for the implementation of virtualization concepts in modern networks
194	Anrdii Zhuravka and Dmytro Ageyev	Increasing of information systems security by methods of system analysis
196	Kyryl Nikolchev, Olena Starkova, Kostiantyn Herasymenko and Mykola Yastrebov	Development of recommendations for the implementation of integrated security in the corporate network at the OSI Data Link layer
198	Volodymyr Astapenya, Volodymyr Buriachok, Volodymyr Sokolov, Pavlo Skladannyi and Dmytro Ageyev	Last Mile Technique for Wireless Delivery System using an Accelerating Lens

# **CONFERENCE CLOSING**

Online (Google Meet) - October 9 – 14:30 - 14:45 https://meet.google.com/uhq-winc-snp Moderator: Prof. Dmytro Ageiev