



**2026 IEEE 18th International Conference on
Advanced Trends in Radioelectronics,
Telecommunications and Computer
Engineering (TCSET)**

Conference Program



**17-21 February 2026
Lviv, Ukraine**

Hybrid Format

ORGANIZERS

- IEEE Ukraine Section
- IEEE Ukraine Section EMB Society Chapter
- IEEE Ukraine Section PHO Society Chapter
- IEEE Ukraine Section COM Society Chapter
- IEEE Ukraine Section SP/AES Societies Joint Chapter
- IEEE Ukraine Section (West) AP/ED/MTT/EP/SSC Societies Joint Chapter
- IEEE Ukraine Section NANO Council Chapter
- Lviv Polytechnic National University

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Mykhaylo Melnyk	IEEE Ukraine Section, IEEE Ukraine Section (West) AP/ED/MTT/EP/SSC Societies Joint Chapter
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ORGANIZING COMMITTEE

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Olha Shpur	Lviv Polytechnic National University, Ukraine
Halyna Beshley	Lviv Polytechnic National University, Ukraine
Olena Hordiichuk-Bublivska	Lviv Polytechnic National University, Ukraine

TECHNICAL PROGRAM COMMITTEE

Track 1. Signal Processing

Ivan Horbatyi	Lviv Polytechnic National University, Lviv, Ukraine
Ivan Maksymiv	Lviv Polytechnic National University, Lviv, Ukraine
Jan Matuszewski	Wojskowa Akademia Techniczna, Warsaw, Poland
Bohdan Rusyn	Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Lviv, Ukraine
Leonid Uryvskyy	Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

Track 2. Communication, Networking and Broadcast Technologies

Mykola Beshley	Lviv Polytechnic National University, Lviv, Ukraine
Pinar Kirci	Bursa Uludag University, Turkey
Orest Kochan	Lviv Polytechnic National University, Lviv, Ukraine
Maryan Kyryk	Lviv Polytechnic National University, Lviv, Ukraine
Vasyl Lytvyn	Lviv Polytechnic National University, Lviv, Ukraine
Jersy Pejas	ZUT Department of Computer Science, Poland

Track 3. Computational Intelligence

Peter Drotár	Technical University of Kosice, Kosice, Slovakia
Juraj Gazda	Technical University of Kosice, Kosice, Slovakia
Yuriy Romanyshyn	Lviv Polytechnic National University, Lviv, Ukraine
Bohdan Rusyn	Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Lviv, Ukraine
Josef Spillner	ZHAW School of Engineering, Winterthur, Switzerland

Track 4. Aerospace and Electronic Systems

Piotr Kaniewski	Military University of Technology, Poland
Vladimir Lukin	National Aerospace University, Kharkiv, Ukraine
Ivan Prudyus	Lviv Polytechnic National University, Lviv, Ukraine

Track 5. Photonics

Anatoliy Andrushchak	Lviv Polytechnic National University, Lviv, Ukraine
Bohdan Mytsyk	Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Lviv, Ukraine
Iryna Yaremchuk	Lviv Polytechnic National University, Lviv, Ukraine

Track 6. Micro- and Nanoelectronics

Anatoliy Andrushchak	Lviv Polytechnic National University, Lviv, Ukraine
Anatoliy Druzhinin	Lviv Polytechnic National University, Lviv, Ukraine
Dmytro Fedasyuk	Lviv Polytechnic National University, Lviv, Ukraine

Track 7. Computer Science

Mykola Dyvak	West Ukrainian National University, Ukraine
Orest Kochan	Lviv Polytechnic National University, Lviv, Ukraine
Oleksandr Lemeshko	Kharkiv National University of Radio Electronics, Kharkiv, Ukraine
Andriy Luntovskyy	BA Dresden Univ. of Coop. Education, Saxon Academy of Studies, Germany
Serhii Toliupa	Taras Shevchenko National University of Kiev, Ukraine
Oleksandra Yeremenko	Kharkiv National University of Radio Electronics, Kharkiv, Ukraine

Track 8. Biomedical Engineering

Roman Holyaka	Lviv Polytechnic National University, Lviv, Ukraine
Yuriy Romanyshyn	Lviv Polytechnic National University, Lviv, Ukraine

Elena Zaitseva University of Žilina, Slovakia

Track 9. Antennas, Microwave Technology and Electromagnetic Compatibility

Ruslan Politanskyi Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine

Ivan Prudyus Lviv Polytechnic National University, Lviv, Ukraine

Yevhen Yashchyshyn Warsaw University of Technology, Poland

CONFERENCE TECHNICAL TRACKS

Track ID	Track Title	Number of accepted papers
T1	Signal Processing	15
T2	Communication, Networking and Broadcast Technologies	24
T3	Computational Intelligence	28
T4	Aerospace and Electronic Systems	8
T5	Photonics	5
T6	Micro- and Nanoelectronics	9
T7	Computer Science	12
T8	Biomedical Engineering	4
T9	Antennas, Microwave Technology and Electromagnetic Compatibility	12
ACCEPTED PAPERS, TOTAL		117
SUBMITTED PAPERS, TOTAL		229
ACCEPTANCE RATE		0,51

TIME LIMITS

Plenary session: up to 45 min	Regular sessions: up to 15 min
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PROGRAM AT A GLANCE

February 17 Tuesday	12:00-16:00	Arrival and registration
February 18 Wednesday	09:00-10:00	Registration
	10:00-10:30	Opening Remarks
	10:30-12:00	Keynote Speech 1,2
	12:00-13:30	Plenary Session 1
	13:30-14:30	Coffee break
	14:30-17:30	Regular Session T1.1
	14:30-17:30	Regular Session T1.2
	14:30-17:30	Regular Session T2.1
	14:30-17:30	Regular Session T2.2
	14:30-18:30	Regular Session T3.1
	14:30-18:30	Regular Session T3.2
February 19 Thursday	09:00-10:30	Keynote Speech 3, 4
	10:30-13:00	Plenary Session 2
	13:00-14:00	Coffee break
	14:00-17:00	Regular Session T2.3
	14:00-18:00	Regular Session T3.3
	14:00-17:00	Regular Session T7.1
	14:00-17:00	Regular Session T7.2
	14:00-17:00	Regular Session T4
February 20 Friday	09:00-13:00	Regular Session T9.1
	09:00-13:00	Regular Session T6
	13:00-14:00	Coffee break
	14:00-16:00	Regular Session T5
	14:00-16:00	Regular Session T8
February 21 Saturday	09:00-11:00	Regular Session T9.2
	11:00-13:00	Conference Final Session

CONFERENCE OPENING

Assembly Hall, Main building

Wednesday, February 18

10:00 – 10:30

[Link to the online meeting](#)

Opening Remarks

1.	<i>Iryna Yaremchuk</i> , Vice-Rector of Lviv Polytechnic National University, Ukraine
2.	<i>Mykhaylo Balaban, Ievgen Pichkalov</i> , IEEE Organizers
3.	<i>Mykhaylo Andriychuk, Mykhailo Klymash, Taras Maksymyuk</i> , IEEE TCSET-2026 OrgCom

KEYNOTE SPEECH

Assembly Hall, Main building

Wednesday, February 18

10:30 – 12:00

[Link to the online meeting](#)

1.	<i>Pavlo Tkachenko</i> Ensuring Trustworthy and Accessible Environmental Data During Information Warfare: The SaveEcoBot Experience from Ukraine
2.	<i>Sergii Velik</i> Information Technology Trends that will Dominate in 2026

PLENARY SESSION

Assembly Hall, Main building

Wednesday, February 18

12:00 – 13:30[**Link to the online meeting**](#)**Chair: Mykhailo Klymash**

1.	<i>Juliy Boiko, Ilya Pyatin, Volodymir Druzhynin</i> Graph Neural Network Approaches to LDPC Decoding in 5G/6G Communications
2.	<i>Oleksandr Lemeshko, Oleksandra Yeremenko, Roman Savchenko, Serhii Shestopalov, Valentyn Lemeshko, Mykhailo Persikov</i> Intelligent Computational Model for QoS-Aware Traffic Engineering Queues
3.	<i>Sergii Ubizskii, Denis Afanassyev, Oleksandr Poshyvak, Vasyl Rabyk, Oksana Nebesniuk, Yaroslav Zhydachevskyy</i> Hardware Means for Immediate Assessment of Radiation Exposure of the Civilian Population in the Radiation Accident Zone
4.	<i>Mykhaylo Andriychuk, Borys Yevstyhneiev</i> Comparative Anylysis of Radiation Characteristics of a Single Impedance Body

T1.1: Signal Processing

Room 214, Main building

Wednesday, February 18

14:30 – 17:30[Link to the online meeting](#)**Chair: Leonid Ozirkovskyy**

1.	<i>Yuriy Shapovalov, Dariya Bachyk, Roman Romaniuk, Vadym Minziuk</i> Symbolic Modeling for Multistage Parametric Amplifiers in the Frequency Domain
2.	<i>Yevgeniy Trotsenko, Julia Peretyatko, Olexandr Protsenko</i> Application of the Three-Capacitance Model for Computer Simulation of Partial Discharge Signals under Ripple Voltage Waveforms
3.	<i>Ivan Horbatyl, Oleksandr Usatyi</i> DoA-Guided GNSS Anti-Jamming via Satellite Selection and Weighting
4.	<i>Yevhenii Trotsenko, Julia Peretyatko, Yaroslav Haran, Serhii Burian, Hanna Zemlianukhina</i> Integrated Simulation of Detection and Calibration Procedures in Partial Discharge Signal Measurements
5.	<i>Volodymyr Havryliuk, Serhij Shemanov</i> Using Correlation Analysis to Detect Excessive Distortion in Audio-Frequency Track Circuit Signals
6.	<i>Reshma S., Sreelal S., Vani Devi M.</i> Signal Processing Techniques for Enhanced Performance of FMCW Radar Altimeter
7.	<i>Vladimir Barannik, Evgeniy Eliseev, Valeriy Barannik, Anatolii Berchanov, Volodymyr Lenets, Oleksandr Fedorovskiy</i> Method of Cluster-Driven Spectral-Parametric Transformant Coding for Adaptive Compression of Segmented Video Data

T1.2: Signal Processing

Room 213, Building XI

Wednesday, February 18

14:30 – 17:30

[Link to the online meeting](#)

Chair: Leonid Uryvsky

1.	<i>Ivan Horbatyi, Volodymyr Horbatyi, Bohdan Tsaitler</i> Comparison of Phase Synchronization Methods in Systems Using Suppressed Carrier Signals
2.	<i>Ivan Tsmots, Vasyl Teslyuk, Vasyl Rabyk, Yurii Opotyak</i> Implementation of Accuracy Improvement Methods for Sensory Data Measurements in Embedded Systems
3.	<i>Vladimir Barannik, Yevhenii Sidchenko, Oleksandr Akimov, Mykhailo Babenko, Serhii Fediuk, Pavlo Onypchenko</i> Adaptive Aperture-Based Image Segmentation for Enhanced ANS Compression and Error Resistance
4.	<i>Andrii Kuzyk, Myron Nykolyshyn</i> Quasi Colored Noise Models and Their Amplitude Distributions
5.	<i>Vladimir Barannik, Yevhenii Sidchenko, Dmitry Barannik, Mykola Fomin, Pavlo Pertsev, Rodion Prokopenko</i> Aperture-Based Segmentation and Value Approximation for rANS Encoding
6.	<i>Yuriy Shapovalov, Dariya Bachyk, Ksenia Detsyk</i> Identification of LPTV Circuits in the Frequency Domain
7.	<i>Oleksandr Malyi, Serhii Harachuk, Oleksandr Shchukin</i> Methods for Over-the-Air Detection and Digital Processing of Wireless Analog Video Signals Using a Microcontroller with Built-in ADC

T2.1: Communication, Networking and Broadcast Technologies

Assembly Hall, Main building

Wednesday, February 18

14:30 – 17:30

[Link to the online meeting](#)

Chair: Mykhailo Klymash

1.	<i>Het Mehta</i> An Autonomous Self-Recovery Framework for Network Systems Using Reinforced Causal Decision Intelligence During Cyber Attacks
2.	<i>Tetiana Holub, Iryna Zeleneva, Galyna Tabunshchuk, Anzhelika Parkhomenko, Svitlana Hrushko, Carsten Wolff</i> FPGA-Based Hardware and Software Architecture for Accelerated Text Processing
3.	<i>Marian Kyryk, Stanislav Maruniak, Leonid Uryvsky</i> BFX: An Interpretable Statistical Tool for Anomaly-Oriented Examination of BGP Features
4.	<i>Inna Rozlomii, Serhii Naumenko, Olga Melnyk, Ruslan Melnyk, Roman Trembovetskyi</i> Context-Aware Lightweight Hashing for Secure Interaction in 6G-IIoT Networks with Node Rotation
5.	<i>Yaroslav Pyrih, Yuliia Pyrih, Taras Andrukhiv</i> Evolutionary Algorithm for Determining the Data Transmission Route between Sensor Nodes
6.	<i>Nazarii Balkovskyi, Mykhailo Klymash, Oleksii Assaul, Yuliia Pyrih</i> Machine Learning Enhanced Zero Trust Architecture for Distributed Information and Communication Systems
7.	<i>Volodymyr Baliar, Olena Mazurkiewicz, Dmytro Diakonov</i> Analysis of Efficient OTT Solutions Based on DVB-S2/ S2X Satellite Technologies

T2.2: Communication, Networking and Broadcast Technologies

Room 226, Main building

Wednesday, February 18

14:30 – 17:30

[**Link to the online meeting**](#)

Chair: Oleksandra Yeremenko

1.	<i>Volodymir Baliar, Kyrylo Liubetskyi, Olena Mazurkiewicz</i> Performance of Adaptive Video Content Delivery Over Best-Effort Communication Networks
2.	<i>Mykhailo Klymash, Kostiantyn Morhoiev, Yuliia Pyrih, Vasyl Babynets</i> Method for Hierarchical Flow-Aware Microservice Placement
3.	<i>Vasyl Oreshkov, Oleksandr Yanevych, Kseniia Tryfonova</i> Research on the Influence of Branch Length on the Transmission Parameters of a Home Electrical Wiring Network
4.	<i>Andrij Senyk, Mykhailo Klymash, Bohdan Tsybulyak, Yaroslav Pyrih, Andrii Holdii</i> Research of Network Monitoring Algorithms Based on Artificial Intelligence
5.	<i>Vyacheslav Vakas, Valerii Koval, Ihor Blinov, Oleksandr Samkov, Oleh Piskun, Bogdan Samkov</i> Resilience Synchronization Networks using Cesium Clock
6.	<i>Larysa Hlinenko, Pavlo Kost</i> Modeling the Weak Signal Transmission under Ionizing Radiation
7.	<i>Murtadha Ali Nsaif Shukur, Nor Muzlifah Binti Mahyuddin</i> A Lightweight GRU-Based Predictive Handover Framework for 6G Networks Using Edge Intelligence

T3.1: Computational Intelligence

Room 301, Building XI

Wednesday, February 18

14:30 – 18:30

[Link to the online meeting](#)

Chair: Taras Maksymyuk

1.	<i>Vladyslav Holdovanskyi, Vladyslav Alieksieiev</i> Towards a More Accurate Determination-Based Correlation Coefficient: Proposals and Empirical Assessment
2.	<i>Roman Chekhmestruk</i> Reinforcement Learning-Based Parameter Optimization for Multi-Material Cloth Simulation
3.	<i>Olena Semenova, Andrii Semenov, Olha Voitsekhovska, Andrii Dzhus, Volodymyr Martyniuk</i> Deep Learning towards Intrusion Detection in IoT
4.	<i>Artem Naboka, Oksana Mazurova</i> Research on the Use of Large Language Models for SQL Query Optimization
5.	<i>Yaroslav Paranchuk, Roman Paranchuk, Oleksiy Kuznyetsov</i> Improving the Dynamics of a Lifting Mechanism Based on Fuzzy Control Approaches
6.	<i>Anton Holosha, Serhii Kovbasa, Sergey Edward Lyshevski</i> Embedded Machine Vision: Machine Learning and Performance Metrics
7.	<i>Arkadiusz Talun, Pawel Drozda, Yuriy Romanyshyn, Sergei Yelmanov, Markiiian Durkot, Oles Tehlivets</i> Neural Network Image Quality Enhancement Using Multiscaling, Attention, and Residuals
8.	<i>Md. Jobayer Ahmed</i> Hybrid CNN–Transformer Ensembles for Enhanced Brain Tumor Diagnosis from MRI
9.	<i>Yuriy Danyk, Valery Shestakov, Roman Shyrshov</i> Methodology for Evaluating the Occurrence, Multiplication, and Spread of Errors in Artificial Intelligence Models
10.	<i>Md Azad Hossain Raju, Abdullah Evna Jafar, Muslima Akter, Israt Jahan Suma, Eftekhar Hossain Ayon, Sowad Rahman</i> When Uncertainty Guides Learning: A Highly Effective Approach to Kidney Disease Classification in CT Imaging

T3.2: Computational Intelligence

Room 109, Building XI

Wednesday, February 18

14:30 – 18:30

[Link to the online meeting](#)

Chair: Marian Kyryk

1.	<i>Marian Pisotskyi</i> Context-Aware Computational Model for Adaptive Big Data Processing Pipelines
2.	<i>Mykhaiylo Melnyk, Yulian Salo, Roman Vavryk, Oleksii Pelekh, Nazariy Dykiy</i> Geographic Information Model for Complex Ecological Analysis in Preselected Geographic Area and Time Dimension
3.	<i>Andrii Pukach, Vasyl Teslyuk, Anatolii Batiuk</i> CI-based Approach for Endowing HCI Subjects Digital Twins with the Property of HCI Object Perception Subjectivization
4.	<i>Oksana Karpinska, Lesia Dubchak, Anatoliiy Sachenko, Oleg Zastavnyy, Bohdan Derysh, Ihor Romanets</i> SqueezeNet-Based Extraction of Compact Feature Vectors from Inspection Video Streams
5.	<i>Maksym Palka, Nataliia Dziubanovska, Leonid Bytsyura, Anatoliiy Sachenko</i> Explainable One-Class Machine Learning for Anomaly Detection in Hydro-Ecological Monitoring
6.	<i>Oleksandr Kurlan, Volodymyr Strukov, Borys Teliatnyk, Oleksandr Kolodiaznyi, Ihor Mazhara, Serhii Nemynushchyi</i> Method of Resource-Optimised Selective Video Encryption using U-Net Semantic Segmentation
7.	<i>Volodymyr Barannyk, Andrii Rohov, Fedir Ustymenko, Oleksandr Slobodyanyuk, Pavlo Hurzhii, Dmytro Uzlov</i> Cross-Environment Integration of Diffusion Models for .NET-Based Computer Vision
8.	<i>Artem Kharchenko, Natalia Pasichnyk, Renat Rizhniak</i> Expert System for Coin Condition Assessment Using Interval Type-2 Fuzzy Sets
9.	<i>Tauhidur Sakib, Mostofa Adib Shakib, M. M. Nasim Osmani Shourov, Saiful Islam Badhon, Lotifur Shabbir, Shayonton Hasan, Md. Abdullah Al Rifat</i> CDFNet Based Fusion Network for Interpretable Alzheimer's Disease Prediction Using Hybrid Imaging and Clinical Meta-Ensemble Learning

KEYNOTE SPEECH

Assembly Hall, Main building

Thursday, February 19**09:00 – 10:30**[**Link to the online meeting**](#)

1.	<i>Oleksii Assaul</i> Industry Network Intelligence in the F5G-A Era
2.	<i>Andriy Luntovskyy</i> Q3C: Current and Future Tenses in IT

PLENARY SESSION

Assembly Hall, Main building

Thursday, February 19**10:30 – 13:00**[**Link to the online meeting**](#)**Chair: Taras Maksymyuk**

1.	<i>Leonid Ozirkovsky, Bohdan Volochiy, Bohdan Husyak, Ihor Kulyk</i> Technique for Quantitative Assessment of Minimal Cut Sets in Mission-Critical Systems with Repair
2.	<i>Olha Shpur, Mykhailo Klymash, Marian Seliuchenko, Nadia Seliuchenko</i> Method for Improving Cache Memory Utilization in Multilayer Edge-Fog-Cloud Infrastructures
3.	<i>Mohammed Zouaoui Laidouni, Touati Adli, Boban Bondžulić, Vladimir Lukin, Bogdan Kovalenko, Sergii Kryvenko</i> Optimal Operation Point Analysis in VVC-Based Compression of Noisy Remote Sensing Images
4.	<i>Olha Shpur, Taras Havryliv, Andriy Luntovskyy</i> Hybrid Anomaly-Based Intrusion Detection System for SDN-Enabled IoT Networks

T2.3: Communication, Networking and Broadcast Technologies

Assembly Hall, Main building

Thursday, February 19

14:00 – 17:00

[**Link to the online meeting**](#)

Chair: Mykhailo Klymash

1.	<i>Serhii Siden, Roman Tsarov, Svitlana Kiiko, Andrii Pavlov, Mykhailo Kutovyi</i> Machine Learning-Based Optimization of 5G Network Topology
2.	<i>Halyna Beshley, Sviatoslav Vilhutskyi, Mykola Beshley, Michal Greguš, sr.</i> AI-Based Proactive Autoscaling Technique for Web Applications in Kubernetes
3.	<i>Yuriy Shkoropad, Mykola Beshley, Halyna Beshley, Michal Greguš, jr., Ihor Dilay</i> Development of an Empirically Calibrated LoRa Physical-Layer Channel Simulation Model
4.	<i>Volodymyr Pastukh, Pavlo Beshley, Serhii Mokhun, Olha Fedchyshyn</i> Functional Generative System Architecture for Natural Language-Driven Control of Cyber-Physical Systems
5.	<i>Leonid Ozirkovskyy, Bohdan Volochnii, Nazar Pryymak, Yuriy Zhuk</i> Quantitative Assessment of the Survivability of a Mission-Critical System with a Hierarchical Structure
6.	<i>Oleksandr Lemeshko, Maksymillian Fuks</i> Research of Secure Traffic Engineering Model with Adaptive Sigmoidal Link Blocking Function
7.	<i>Yuriy Zanichkovskyy, Larysa Hlinenko, Volodymyr Fast</i> Contextual Multi Arm Bandit Framework for Adaptive Video Streaming

T3.3: Computational Intelligence

Room 226, Main building

Thursday, February 19

14:00 – 18:00

[Link to the online meeting](#)

Chair: Mykola Dyvak

1.	<i>Serhiy Sveleba, Ivan Katerynychuk, Ivan Kuno, Marta Dufanets, Nazar Sveleba</i> Dynamic Regime Maps of Multilayer Neural Network Training Using the Adam Optimizer
2.	<i>Vitalii Savchenko, Pavlo Shchypanskyi, Oleksandr Matsko, Serhii Lienkov</i> Study of Neural Network Performance for Enhancing SDN Resilience Against Cyberattacks
3.	<i>Oksana Mulesa, Tamara Radivilova, Larysa Chala, Marian Tokar, Vladyslav Peresoliak, Golik Jolana</i> Information Technology for the Selection of Social Service Recipients Based on the Fuzzy Classification Method
4.	<i>Dmytro Voitekh, Anatolii Tymoshenko, Volodymyr Pavlenko</i> Comparing Independent and Centralized Multi-Agent Learning for District Energy Systems
5.	<i>Tauhidur Rahman Sakib, Mostofa Adib Shakib, Saad Ibn Munir, Saiful Islam Badhon, Md. Sadman Yeasir Sakif, Mim Deb Roy</i> Predicting Super-Class Drug Mechanisms from Large-Scale IC50 Cell-Line Sensitivity Profiles
6.	<i>Ivan Rudavskyi, Halyna Klym</i> Air Quality Forecasting Using a Long Short-Term Memory Neural Network
7.	<i>Andrii Liashenko, Larysa Globa</i> A Method for Dynamic Graph Weight Adaptation in IoV Networks Using Fuzzy-Based Exponential Smoothing
8.	<i>Sowad Rahman, Fabliha Afaf Sarwar, Showrin Rahman</i> Hamiltonian Neural Networks for Energy-Efficient Autonomous Electric Vehicle Control
9.	<i>Anna Kovalova</i> Adaptive Reinforcement Learning-Based Test Selection for Improving Web Application Testing Accuracy

T7.1: Computer Science

Room 301, Building XI

Thursday, February 19

14:00 – 17:00[Link to the online meeting](#)**Chair: Olha Shpur**

1.	<i>Olena Hordiichuk-Bublivska, Oksana Urikova, Andrii Masiuk, Oleksandr Androsiuk</i> Enhancement of User Query Processing in Distributed Databases
2.	<i>Serhii Pavlyk, Dmytro Kushnir</i> Design and Implementation of an Integrated Windows Kernel-Level File and Network Control System
3.	<i>Serhiy Semenyuk, Ihor Zhuravel</i> A SIRA-CTMC Model for Analyzing and Predicting Cybersecurity Threats
4.	<i>M. Depakkumar, G. Gururagavendran, B. Blessed Sam</i> A Digital Twin-Enhanced Battery Management System with Adaptive Learning for Electric Vehicle Applications
5.	<i>Mykola Beshley, Marian Seliuchenko, Halyna Beshley, Mykhailo Medvetskyi, Vincent Karovič, jr., Serhii Onishchenko</i> Latency-Aware Service Endpoint Selection Method for Resilient Distributed Systems

T7.2: Computer Science

Room 213, Building XI

Thursday, February 19

14:00 – 17:00[Link to the online meeting](#)**Chairs: Victoria Vysotska and Mykola Beshley**

1.	<i>Maksym Kotov, Serhii Toliupa, Oleksandr Buchyk</i> Decentralization Model for the Replica State Discovery Protocol
2.	<i>Hesam Rezaee Ahvanouee, Raghuveer Rajesh Dani, Aditi Shirke, Galyna Tabunshchuk</i> Data Management Framework for the Process Digital Twin
3.	<i>Pullagura Santosha, Nitin Pandita, Aman Kakwani, Santhosh A., Kundhavai K. R.</i> SmartGuard: A Machine Learning Based Classification Framework for Automated DoS/DDoS defense in Next-Generation Firewall Systems
4.	<i>Andriy Velhosh, Yuriy Furgala, Serhiy Velhosh, Petro Venheskyi</i> Assessing Image Similarity with Color Histograms to Reveal Security-Related Distortions
5.	<i>Evgeniy Lavrov, Ihor Klymenko, Olga Siryk, Artem Bykov, Yana Chybiriak, Maksym Ostapenko, Tetiana Shovkoplias</i> Method of Preventing Human Operator Errors Using Technology for Identifying Possible Problem Situations during Operation of ERP Systems
6.	<i>Nataliia Kukharska, Roman Martyniuk, Orest Polotai, Serhiy Semenyuk</i> Hidden Embedding of Encrypted Data into Images via Hamming Coding and Pseudorandom Positioning

T4: Aerospace and Electronic Systems

Room 112, Building XI

Thursday, February 19

14:00 – 17:00

[Link to the online meeting](#)

Chairs: Andrii Fechan and Yuriy Romanyshyn

1.	<i>Spartak Mankovsky, Oleh Forostyna</i> Passive Method of Object Location by Doppler Shift Change (OWLEARS-1)
2.	<i>Jan Matuszewski, Tomasz Kraszewski</i> Emitter Location Errors in the Triangulation Method based on Bearing Measurements
3.	<i>Fedir Katushonok, Maksym Zaliskyi, Olga Shcherbyna, Oleksandr Zadorozhnyi</i> Reliability Analysis of the Angle of Arrival System Based on Software Defined Radio Applications
4.	<i>Ivan Ostroumov, Daria Tkachuk, Nataliia Kuzmenko</i> Surveillance Data Processing in a Multi-Radar Localization System
5.	<i>Bohdan Kopchak, Vira Oksentyuk, Andrii Kushnir, Dmytro Kolesnik, Andrii Mandiuk, Ihor Babii</i> Combined Method Development the BLDC Electric Drive Model of Drone
6.	<i>Sergey Peresada, Yevhen Nikonenko, Sergey Edward Lyshevski</i> High-Performance Brushless Motors for Aerial Vehicles
7.	<i>Vadim Yakovenko, Nataliia Furmanova, Oleksandr Lulka, Stanislav Chumak, Oleksandr Malyi</i> Adaptive Structural-Automaton Modeling of Sensor-Actuator Systems for Flying Target Detection and Tracking in a Reconnaissance-Strike Complex

T9.1: Antennas, Microwave Technology and Electromagnetic Compatibility

Slavske, camp Polytechnic-2

Friday, February 20

09:00 – 13:00

[Link to the online meeting](#)

Chair: Mykhaylo Andriychuk

1.	<i>Volodymyr Storozh, Ivan Prudyus, Serhii Fabirovskyi, Valeriy Oborzhytskyy, Yuriy Matiieshyn, Victor Protasevych</i> Research on a Wideband Patch Antenna with an Air Gap
2.	<i>Ahmed K. Daraj, Mahmood F. Mosleh, Raed Abd-Alhameed, Ghalib Najm Radad</i> Wearable Antenna Design for Medical WBAN Applications Supporting Next-Generation Wireless Systems (5G/6G)
3.	<i>Oleksandra Skvortsova, Mikhail Nesterenko, Oleksandr Dumin, Yuriy Arkusha</i> Input Characteristics of Monopole with Cross-Sectional Radius Varying along its Length
4.	<i>Igor Bondarenko, Oleksandr Hnatenko, Alexander Gritsunov, Olexiy Pashchenko, Hennadii Bendeberia, Mykhaylo Kopot</i> On the Competition of Modes in a Magnetron with Significant Role of Space Charge
5.	<i>Yulia Rassokhina, Vladimir Krizhanovski, Dmitrii Chernov</i> Tapered Transitions from Double-Sided to Balanced Microstrip Line

T6: Micro- and Nanoelectronics

Slavske, camp Polytechnic-2

Friday, February 20

09:00 – 13:00[Link to the online meeting](#)**Chairs: Sergii Ubizskii and Khrystyna Ivaniuk**

1.	<i>Igor Melnyk, Mykhailo Skrypka, Olga Demyanchenko</i> Theoretical Investigation of Using Deviation for Interpolation of Electron Beam Boundary Trajectories by Root-Polynomial Functions
2.	<i>Andrey Degtyarev, Mykola Dubinin, Vyacheslav Maslov, Konstantin Muntean, Vladislav Senyuta</i> Propagation Dynamics of Radially Polarized Terahertz Laser Beams with a Phase Singularity
3.	<i>Serhii Shylo, Oleksandr Kapliienko, Andrii Korotun</i> More on the Size Effects on Photoemission in Plasmonic Solar Cells
4.	<i>Andrii Korotun, Liliia Abramenko, Valery Kurbatsky</i> Optical Properties of Ordered Metal-Dielectric Nanocomposites with Axially Symmetric Inclusions
5.	<i>Oleh Shevchenko, Natalia Liakh-Kaguy, Anatoly Druzhinin, Stepan Nichkalo, Igor Ostrovskii</i> Peculiarities of the Electrophysical Characteristics of SiGe Whiskers under the Influence of Strain
6.	<i>Iryna Kremer, Olha Shymchyshyn, Mariia Ivakh, Ruslan Tykhovetskyi</i> Hybrid Dynamic-Statistical Algorithm for Optimizing CMOS-Type System Configuration
7.	<i>Nataliia Kuzyk, Ihor Semkiv, Khrystyna Ivaniuk, Pavlo Stakhira, Iryna Yaremchuk, Mohamed Abdella, Jurate Simokaitiene, Dmytro Volyniuk, Juozas Vidas Grazulevicius</i> Development of Organic Photodetectors Based on Benzothiadiazole and Fluorene Derivatives
8.	<i>Roman Korolkov, Vitalii Reva, Mykyta Shvydkiy, Andrii Korotun, Evgeniy Stegantsev</i> Thermal Masking in Multilayer Cylindrical Structures
9.	<i>Khrystyna Ivaniuk, Oleh Klymkevych, Serhii Melnykov, Anna Pidluzhna, Ihor Semkiv</i> Spectral and Photovoltaic Analysis of InAgS Quantum DOT-Based Ternary Solar Cells: a Comparison with Standard P3HT:C70 Systems

T5: Photonics

Slavske, camp Polytechnic-2

Friday, February 20

14:00 – 16:00[Link to the online meeting](#)**Chairs: Bohdan Mytsyk and Nataliya Demyanyshyn**

1.	<i>Eugene Odarenko, Yuriy Averkov, Liubov Ivzhenko, Sergiy Yuhno, Yevhen Sulima, Elena Linnyk</i> Eigenmodes of Photonic Crystal Waveguides Based on the Kagome Lattice
2.	<i>Yevhen Demydenko, Vladyslav Novytskyi, Eugene Odarenko, Yuriy Averkov, Liubov Ivzhenko, Vyacheslav Maslov</i> Dispersion Characteristics and THz Vortex-Like Modes of the InSb Photonic Crystal
3.	<i>Pavlo Solomenchuk, Nataliya Demyanyshyn, Marian Andrushchak, Oleh Buryy, Oleksandr Lishchuk, Bohdan Mytsyk</i> Optimization of Acousto-Optic Interaction in BTGS Crystals
4.	<i>Bohdan Mytsyk, Nataliya Demyanyshyn, Oleksandr Lishchuk, Kiyoshi Shimamura, Encarnación G. Villora, Anatoliy Andrushchak, Yaroslav Kost</i> Photoelasticity of the $\text{Ca}_3\text{TaAl}_3\text{Si}_2\text{O}_{14}$ Crystal
5.	<i>Andriy Fechan, Yuriy Bashtyk, Nataliya Fechan</i> Implementing Dynamic Contrast in Edge-Lit Liquid Crystal Displays

T8: Biomedical Engineering

Slavske, camp Polytechnic-2

Friday, February 20

14:00 – 16:00[*Link to the online meeting*](#)**Chairs: Roman Holyaka and Pavlo Stakhira**

1.	<i>Andrii Sokoltsov, Nataliia Shushliapina, Oleg Avrunin, Yana Nosova, Oleksandr Avrunin, Ihor Kandaurov</i> Full-Scale 3D Models for Training in Rhinoscopic Interventions
2.	<i>Serhii Misochenko, Karina Selivanova</i> Comparative Evaluation of Data Augmentation Strategies for Brain Tumor Segmentation on Small MRI Datasets
3.	<i>Md. Jobayer Ahmed</i> Smart Blind Stick: An IoT-Enabled, Arduino NanoBased Assistive Device for the Visually Impaired

T9.2: Antennas, Microwave Technology and Electromagnetic Compatibility

Slavske, camp Polytechnic-2

Saturday, February 21

09:00 – 11:00

[Link to the online meeting](#)

Chair: Serhiy Fabirovskyi

1.	<i>Yaroslav Gritsev, Olga Shcherbyna</i> The Principle of Matching Patch Elements in Broadband Antenna Array
2.	<i>Mykhaylo Andriychuk, Viktor Tkachuk</i> Application of Quasioptical Transmissing Line for Transformation of the EM Fields
3.	<i>Dmytro Havrylenko, Maksym Efimchyk, Serhii Berdnyk, Oleksandr Dumin</i> Propagation of a Transient Electromagnetic Wave Excited by a Delta-Like Current
4.	<i>Vladimir Krizhanovski, Dmitrii Chernov, Vasyl Komarov, Andrei Grebennikov</i> Class E Oscillator Stabilized by a Piezoceramic Resonator
5.	<i>Mykhaylo Andriychuk, Taras Nazarovets</i> The Improved Models for Calculation of Human Body SAR in the Case of Sitting Position
6.	<i>Tetiana Bugrova, Volodymyr Onufrienko, Liudmyla Logachova, Mykhailo Chornoborodov</i> Vivaldi Antennas with Varied Fractal Scaling

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SLAVSKE MAP

