

SECURITY OF MODERN INFORMATION AND COMMUNICATION SYSTEMS
SMICS- 2026

CONFERENCE PROGRAM

24-26 September 2026

Lviv - Krakow

The project "AI-Driven Cybersecurity: Opportunities and Challenges" is funded by the Swedish Institute within the SI Baltic Sea Neighbourhood Programme (Project ref.number: 00285/2025).

Organizers:

- Ivan Franko National University of Lviv
- University of the National Education Commission, Poland
- State University of Information and Communication technologies
- Science Entrepreneurship Technology University of Kyiv
- Opole University of Technology, Poland
- Rowan University, USA
- Halmstad University, Sweden
- NGO “Cybersecurity Specialists Association”
- Cyber Defense Academy (CDA)

Conference Tracks

- Cyber Defense of Communication Systems and Cloud Infrastructure, Incident Management
- Methods of Countering Disinformation Influence and Social Engineering
- Security of IoT Devices, Cyber-Physical Systems Software, Technical Solutions for Information Security

PROGRAMING COMMITTEE CO-CHAIR

BAK W. – Deputy Rector of the University of the National Education Commission, Krakow, dr hab. prof. (Poland)
GLADYSHEVSKII R. – Rector of Ivan Franko National University of Lviv, Academician of the National Academy of Sciences of Ukraine, Doctor of Chemical Sciences, Professor (Ukraine)

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PROGRAM COMMITTEE

BUHRII O. – Vice-Rector for Research, Teaching, Social and Humanitarian Development, Ivan Franko National University of Lviv, Doctor of Physical and Mathematical Sciences, Professor (Ukraine)
DAVYDENKO A. – Leading Research Fellow, Pukhov Institute for Modelling in Energy Engineering of the National Academy of Sciences of Ukraine, Doctor of Technical Sciences, Professor (Ukraine)
EDISON PIGNATON DE FREITAS - Professor & Future Industry Research Program Leader Halmstad University (Sweden)
HNATYSHIN V. - Department of Computer Science Head, Full Professor, Rowan University (USA)
IVANCHENKO Y. – Director of the Educational-scientific Institute of Cyber Security and Information Protection, State University of Information and Communication Technologies, Doctor of Technical Sciences, Professor (Ukraine)
KLYMASH M. — Head of the Department of Information and Communication Technologies, Lviv Polytechnic National University, Doctor of Technical Sciences, Professor (Ukraine)
KLOTS Y. – Head of the Department of Cybersecurity, Khmelnytskyi National University, Candidate of Technical Sciences, Associate Professor
KORCHENKO O. – First Vice-Rector, State University of Information and Communication Technologies, Doctor of Technical Sciences, Corresponding Member of the National Academy of Sciences of Ukraine, Doctor of Technical Sciences, Professor (Ukraine)
MAHMOUD RAHAT - Associate Professor Halmstad University(Sweden)
NOVIKOV O. - Director of the ESI of Physics and Technology, Corresponding Member of NASU, Dr. Tech. Sci., Prof. Igor Sikorsky Kyiv Polytechnic Institute (Ukraine)
OPIRSKYY R. – Head of the Department of Information Technology Security,

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Lviv Polytechnic National University, Doctor of Technical Sciences, Professor (Ukraine)
PARKHUTS L. - Professor of Dept. of IT Security, Dr. Tech. Sci., Professor Lviv Polytechnic National University (Ukraine)
RZASA M. - Head of the Department of Cybersecurity, Full Professor, Opole University of Technology (Poland)
TKACH Y. – Head of the Department of Cybersecurity and Mathematical Modeling, National University "Chernihiv Polytechnic", PhD in Technical Sciences, Doctor of Pedagogical Sciences, Professor (Ukraine)
TORSTENSON O. – Programme Director, Master's Programme in Network Forensics (Sweden)
UDOVYK I. – Dean of the Faculty of Information Technologies, National Technical University "Dnipro Polytechnic", Cand. Tech. Sci., Professor (Ukraine)
VASUTA O. - Director of the Institute of Information Technology, University of the National Education Commission, Krakow, dr hab. prof. (Poland)

SCIENTIFIC SECRETARY

GUTIK O. –Ivan Franko National University of Lviv, Ukraine

ORGANIZING COMMITTEE CO-CHAIR

SEMENOV S. –Krakow University of the National Education Commission, Poland
VENHERSKYI P. –Ivan Franko National University of Lviv,Ukraine

MEMBERS:

BOBERSKYY Y. - Bachelor of Science in Cybersecurity, Ivan Franko National University of Lviv, Ukraine
HRYTSYSHYN O. - Assistant, Dept. of Cybersecurity Ivan Franko National University of Lviv, Ukraine
KARPIUK R. - Senior Lecturer, Dept. of Cybersecurity Ivan Franko National

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University of Lviv, Ukraine
KOKOVSKA Y. - Associate Professor, Cand. Phys.-Math. Sci. Ivan Franko National University of Lviv, Ukraine
KROPYVA M. - Senior Lecturer, Dept. of Cybersecurity Ivan Franko National University of Lviv, Ukraine
KRZACZEK B. - Deputy Director of the Institute of Security and Information Technology for IT, PhD, University of the National Education Commission, Krakow, Poland
KUZBYT Y. - Assistant, Dept. of Cybersecurity Ivan Franko National University of Lviv, Ukraine
KYRYCHENKO N. - Engineer, Dept. of Cybersecurity Ivan Franko National University of Lviv, Ukraine
MELNYK I. - Associate Professor, Cand. Phys.-Math. Sci. Ivan Franko National University of Lviv, Ukraine
POPADIUK O. - Associate Professor, PhD, Ivan Franko National University of Lviv, Ukraine
PRYGARA M. - Associate Professor, Cand. Tech. Sci., Uzhhorod National University, Ukraine
SHCHERBYNA M. - Senior Lecturer, Co-Chair of Organizing Committee Ivan Franko National University of Lviv, Ukraine
TERLETSKYY O. - Assistant, Dept. of Cybersecurity
Ivan Franko National University of Lviv, Ukraine
TOMKIEWICZ L. - Employee of the Institute of Security and Information Technology for IT University of the National Education Commission, Krakow, Poland
TRUSHEVSKYY V. - Associate Professor, Cand. Phys.-Math. Sci., Ivan Franko National University of Lviv, Ukraine
VLASOV V. - Associate Professor, Cand. Phys.-Math. Sci., Ivan Franko National University of Lviv, Ukraine
ZLATOUS S. - Assistant, Dept. of Cybersecurity Ivan Franko National University of Lviv, Ukraine

Si. Swedish Institute

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Track 1. Cyber Defense of Communication Systems and Cloud Infrastructure, Incident Management

CHAIR:

KORCHENKO O.– State University of Information and Communication Technologies, Ukraine

MEMBERS:

OPIRSKYY R. – Head of the Department of Information Technology Security, Lviv Polytechnic National University, Doctor of Technical Sciences, Professor (Ukraine)

PARKHUTS L. - Professor of Dept. of IT Security, Dr. Tech. Sci., Professor Lviv Polytechnic National University (Ukraine)

KLOTS Y. – Head of the Department of Cybersecurity, Khmelnytskyi National University, Candidate of Technical Sciences, Associate Professor

TKACH Y. – Head of the Department of Cybersecurity and Mathematical Modeling, National University "Chernihiv Polytechnic", PhD in Technical Sciences, Doctor of Pedagogical Sciences, Professor (Ukraine)

Track 2. Methods of Countering Disinformation Influence and Social Engineering

CHAIR:

KONDRATIUK S. – State University of Information and Communication Technologies, Ukraine

MEMBERS:

VASUTA O. - director of the Institute of Information Technology, University of the National Education Commission, Krakow, dr hab. prof. (Poland)

RZASA M. - Head of the Department of Cybersecurity, Full Professor, Opole University of Technology (Poland)

IVANCHENKO Y. – Director of the Educational-scientific Institute of Cyber

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Security and Information Protection, State University of Information and Communication Technologies, Doctor of Technical Sciences, Professor (Ukraine)
DAVYDENKO A. – Leading Research Fellow, Pukhov Institute for Modelling in Energy Engineering of the National Academy of Sciences of Ukraine, Doctor of Technical Sciences, Professor (Ukraine)
MAHMOUD RAHAT - Associate Professor Halmstad University(Sweden)

Track 3. Security of IoT Devices, Cyber-Physical Systems Software, Technical Solutions for Information Security

CHAIR:
KLYMASH M. - Lviv Polytechnic National University, Lviv, Ukraine.

MEMBERS:
HNATYSHIN V. - Department of Computer Science Head, Full Professor, Rowan University (USA)
NOVIKOV O. - Director of the ESI of Physics and Technology, Corresponding Member of NASU, Dr. Tech. Sci., Prof. Igor Sikorsky Kyiv Polytechnic Institute (Ukraine)
EDISON PIGNATON DE FREITAS - Professor & Future Industry Research Program Leader Halmstad University (Sweden)
TORSTENSON O. – Programme Director, Master's Programme in Network Forensics (Sweden)

Workshop: Cryptology and Data Security

CHAIR:

YEVSEIEV S. – National Technical University "Kharkiv Polytechnic Institute", Ukraine

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MEMBERS:

KARPINSKI M. – Head of the Department of Software Engineering, Full Professor, University of the National Education Commission (Poland)

LUPENKO S. – Head of the Department of Information Systems and Control, Full Professor, Opole University of Technology (Poland)

Workshop: Artificial Intelligence for Cybersecurity

CHAIR:

LANDE D. – Head of the Department of Information Security, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Doctor of Technical Sciences, Professor (Ukraine)

MEMBERS:

VYNOKUROVA O. – Professor of the Department of Cybersecurity, Ivan Franko National University of Lviv, Doctor of Technical Sciences, Professor (Ukraine)

PELESHKO D. – Professor of the Department of Cybersecurity, Ivan Franko National University

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PLAN CONFERENCE

24 September 2026

8.00-10.00 – Registration
10.00-11.00 – Opening of conference.
11.00-13.00 – Plenary reports
13.00-14.00 – Coffee break, Dinner.
14.00-17.30 – Parallel working Tracks and workshops groups
16.00-17.30 - Virtual Panel on Cybersecurity and Global Economy
17.30-19.30 – Welcome Party.

25 September 2026

9.00-10.00 – Coffee break, Networking
10.00-13.00 – Parallel working Tracks and workshops groups.
13.00 - Presentation of certificates

26 September 2026

9:00 – 12:00 - Departure of participants

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CONFERENCE
24th SEP 2026

8.00 - 10.00 – Registration ***(Main building of University of National Education Commission, Podchorążych str 2, Kraków, hall in front of room A1)***

10.00-11.00 – Opening of conference.
(Podchorążych* str *2, room A1).

Moderators:
SEMENOV S. *–University of the National Education Commission, Krakow, Poland*
VENHERSKYI P. *–Ivan Franko National University of Lviv, Ukraine*

10:05 - 10:10	*Innovative programs of the University of the National Education Commission*	**BAK W.** – Deputy Rector of the University of the National Education Commission, Krakow Poland
10:10 - 10:15	*Ivan Franko National University of Lviv: tradition and innovation*	**BUHRII O.** – Vice-Rector for Research, Teaching, Social and Humanitarian Development, Ivan Franko National University of Lviv, Ukraine

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10:15 - 10:20	*UKEN Kraków: Science and Innovation for a Secure Digital Future*	**ROGOZ M.** - Vice-Rector for Science, University of the National Education Commission, Krakow, Poland
10:20 - 10:25	*Scientific focus of the Igor Sikorsky Kyiv Polytechnic Institute*	**NOVIKOV O. -** Director of the Educational and Scientific Physics and Technology Institute, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine
10:25 - 10:30	*Innovative programs of the State University of Information and Communication Technologies*	**SHULGA V. -** Rector of the State University of Information and Communication Technologies, Ukraine
10:30 - 10:35	*Innovative program Network Forensics of the Halmstad University*	**TORSTENSON O.** – Programme Director, Master's Programme in Network Forensics, Halmstad University, Sweden
10:35 - 10:40	*Application of artificial intelligence in projects*	**KROPYVA M. -** Chief of the InfoSec department at SoftServe.

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10:40 - 10:45	*National Agency for Quality Assurance in Education*	**UDOVYK I.** - Chairman of the Sectoral Expert Council, Ukraine
10:45 - 10:50	*Education programs of the Institute of Security and Information TechnologyUniversity of the National Education Commission*	**VASUTA O.** - Director of the Institute of Security and Information Technology, University of the National Education Commission, Krakow, Poland

11.00-13.00 – Plenary reports
(Podchorążych* str *2, room A1).

Moderators:
KOKOVSKA YA. *–Ivan Franko National University of Lviv, Ukraine*
VASUTA O. *- University of the National Education Commission, Poland*

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11:00 - 11:20	*Cybersecurity: several major challenges*	**Mikolaj Karpinski** (Head of Department of Software Engineering, University of the National Education Commission in Krakow, Poland)
11:20 - 11:40	*Dynamics of Knowledge Degradation in Recursive Language Model Ecosystems*	***Dmytro Lande*, Viktoriia Polutsyhanova** (National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine)
11:40 - 12:00	*A Set-Theoretic Approach to Assessing Cyber-Resilience of Critical Infrastructure Facilities in Smart Regions*	**Oleksandr Korchenko, Anatolii Davydenko** (State University of Information and Communication Technologies), ***Yuliia Khokhlachova*** (State University of Trade and Economics), Ukraine

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12:00 - 12:20	*Data Concealment Increasing Method Based on LDPC Codes*	**Sergey Dunaev, Serhii Yevseiev, Olha Korol, *Vladyslav Sokol*** (National Technical University 'Kharkiv Polytechnic Institute' Ukraine)
12:20 - 12:40	*The necessity of controlling artificial intelligence at the level of basic networks when expanding its application*	**Oleksandr Korchenko, *Anatolii Davydenko*, Anton Herasymenko, Olena Vysotska, Mykhailo Prygara** (State University of Information and Communication Technologies, Ukraine)
12:40 - 13:00	*On new postquantum stream ciphers of multivariate nature defined in terms of temporal algebraic graphs*	**Oleksandr Pustovit, *Vasyl Ustimenko*, Tymofii Svyrydenko** (Royal Holloway University of London, United Kingdom)

13.00-14.00 – Coffee break, Dinner.

14.00-17.00 – Parallel working Tracks groups.

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Track 1
Cyber Defense of Communication Systems and Cloud Infrastructure, Incident Management

14.00-17.00 24.09,
10.00-13.00 25.09
Track 1 (Podchorążych* str *2, room 424N).

Moderators:
***Ivan Azarov**, State University of Information and Communication Technologies*
***Valeriy Trushevskyy**, Franko National University of Lviv, Ukraine*

Secretary:
***Sviatoslav Zlatous**, Franko National University of Lviv, Ukraine.*
***Oleksandr Terletskyi**, Franko National University of Lviv, Ukraine.*

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Passcode: nE77Hd3q

Track ID - 1	Track Title	Author
Tr.1.1	Cognitive Correlation of Cyber Threats across OSI Model Layers for Incident Response Support	Dmytro Prokopovych-Tkachenko

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Tr 1.2	A Blockchain-Oriented Method for Ensuring Integrity and Traceability of Cybersecurity Data	Kostiantyn Babenko
Tr 1.3	Cognitive-Adaptive Protection of Government Digital Resources Based on Contextual Cyber-Risk Assessment	Borys Khrushkov
Tr 1.4	Secure Hybrid Meta-Search of Cybersecurity Data for SOC Operations	Ihor Kozachenko
Tr 1.5	Ground-Truth Anomaly Injection for Cloud Autoscaling: A Reproducible Evaluation Method and a Metastable Denial-of-Service Failure Mode	*Pavlo O. Kudrynskyi*, Maksym Sash, Oleksandr S. Zvenihorodskyi
Tr 1.6	Optimization of Enterprise Information System Resource Allocation Considering Cyber Resilience Requirements	*Maksym Korepanov,* Viktor Sahaidak
Tr 1.7	Validation of the results of automated vulnerability detection and prediction in cybersecurity systems	Vladyslav Denysiuk
Tr 1.8	Cost-Efficient Mutation-Guided Fuzzing for Security Assessment of Cyber-Physical Systems Software	*Anton Samoylenko*, Irina Shcherbyna
Tr 1.9	Cross-Day Validation of FPR-Constrained Operating Thresholds for XGBoost-Based Botnet Detection	*Vladyslav Samoilenko,* Sergii Gakhov
Tr 1.10	Mathematical Method and Criteria for Assessing the Physical Security of Server Hardware in Cloud Services	*Yevhenii Pedchenko*, Yevheniia

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		Ivanchenko, Ihor Ivanchenko, Maryna Pedchenko, Yurii Korovaichenko
Tr 1.11	Autonomous Defensive Agents for Continuous Detection of AI-Powered Attacks on Educational Systems	Stepan Prokipchyn
Tr 1.12	Assessing the Ability of Large Language Models to Reproduce Expert Classification of User Identification Parameters by Anonymity Levels	Ivan Azarov, Oleksandr Korchenko, Anna Korchenko, Illia Azarov
Tr 1.13	Differentiated Generalization of a Random Forest-Based Malicious Process Detection Method Across Novel Attack Categories	Yurii Korovaichenko, Sergii Gakhov, Yevhenii Pedchenko
Tr 1.14	An Integrated Decision-Support Loop for Cyber-Incident Neutralization in Military Command and Control: From the Evaluation Image to an Admissible Response	Hennadii Rybachok
Tr 1.15	Методика виявлення фішингових електронних повідомлень на основі гібридних алгоритмів машинного навчання	Ігор Аверічев, Петро Поночовний

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Tr 1.16	Design and Development of a LoRa-Based Emergency Communication System for Remote Areas	Sandhiya T , Sarasree S, Ramadevi C
Tr 1.17	Empirical Validation of an Azure-Based Data Classification Pipeline for SOC 2 Type 2 Compliance: Benchmarking Eight Large Language Models	Oleh Deineka, Oleh Harasymchuk, Yevhen Martseniuk, Andrii Partyka
Tr 1.18	Set-Theoretic Approach to Automating Cyber-Resilience Assessment of Critical Infrastructure Facilities	Yuliia Khokhlachova, Kateryna Khokhlachova
Tr 1.19	Acoustic Anomaly Detection for Indoor Intrusion Using Ray-Traced Room Impulse Responses	Oleksandr Terletskyy, Valeriy Trushevskyy, Ostap Hrytsyshyn

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Track 2
Methods of Countering Disinformation Influence and Social Engineering

14.00-17.00 24.09,
10.00-13.00 25.09
Track 2 *(**Podchorążych* **str** *2, room 412N).*

Moderators:
Serhij Kondratiuk*, State University of Information and Communication Technologies, Ukraine*
Olha Popadiuk**,** *Franko National University of Lviv, Ukraine*

Secretary:
Yurii Boberskyy*, Franko National University of Lviv, Ukraine.*
Ostap Hrytsyshyn*, Franko National University of Lviv, Ukraine*

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Track ID - 2	Track Title	Author
Tr.2.1	A Risk-Oriented Cybersecurity Architecture for Personal Data of Socially Vulnerable Populations	Oleh Poplavskyi
Tr 2.2	Velocity Features as the Structural Invariant of Card-Testing Attacks in	Yurii Kuzhii, Yurii Furgala

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	Online Payment Systems	
Tr 2.3	A Cognitive Protection Model against Hybrid Cyber Attacks	Peremetchyk Danylo
Tr 2.4	Explainable AI-Assisted Hybrid Risk Scoring for Phishing and Social Engineering Email Detection	Dmytro Yurchyk
Tr 2.5	Mechanism of Cognitive Warfare Impact and Potential Approaches to Effective Counteraction	Stanislav Shumlianskyi, Serhiy Kostyria, Volodymyr Budz
Tr 2.6	Graph Centrality and Clustering Metrics for Identifyng Automated Accounts in Social Networks	Nataliia Kyrychenko
Tr 2.7	Ethical and Legal Frameworks for AI Deployment in Government Analytical Systems: Neutralizing Social Engineering Threats	Andrii Salov
Tr 2.8	Investigation and Testing of a Data Loss Prevention Method for LLM-Based Systems	Liliia Pushkar, Valeriy Trushevskyy
Tr 2.9	Attribution, liability, and emerging norms in AI-driven cyber operations	Myron Patsai, Danylo Shcherbyna
Tr 2.10	C-Classically Prime Subsemimodules and Their Application to Semigroup Action Key Exchange	Ivanna Melnyk, Andriy Andrushko
Tr 2.11	Eduard B. FLEIßNER and his textbook “Handbuch der Kryptographie” (Eduard	Oleg Gutik, Mykola

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	B. FLEIßNER and his textbook "Handbuch der Kryptographie")	Shcherbyna, Yurii Boberskyy
Tr 2.12	Event-Driven Security Monitoring for Serverless Architectures: Behavioral Analysis of Function and Service Interactions	Sviatoslav Zlatous, Petro Venherskyi
Tr 2.13	Blockchain-based data integrity verification for multi-sensor flood prediction systems	Orest Onyshchenko, Yaryna Kokovska
Tr 2.14	Methods for optimizing resource allocation in cybersecurity systems	Olha Popadiuk
Tr 2.15	A mathematical model for assessing the cyber resilience of an information resource with regard to input data adequacy	Oleksandra Kovalchuk, Eugenia Ivanchenko
Tr 2.16	Application of Zero Trust Architecture for Access Control in Heterogeneous IoT Networks	Anton Nikitin, Serhii Zybin
Tr 2.17	Predictive Cyber Threat Intelligence: Combining NLP-Based Entity Extraction with Graph Link Prediction	Yevheniia Ivanchenko, Iryna Lozova, Polina Halushka
Tr 2.18	AI-Driven Cybersecurity: Challenges and Research Directions	Olga Torstensson, Dmytro Prokopovych-Tkachenko

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Track 3
Security of IoT Devices, Cyber-Physical Systems Software, Technical Solutions for Information Security
14.00-17.00 24.09,
10.00-13.00 25.09
Track 3 ***(Podchorążych* str *2, room 413N).***

Moderators:
Serhii Lupenko, *Opole University of Technology, Poland*
Mykola Shcherbyna, *Franko National University of Lviv, Ukraine*

Secretary:
Ivanna Melnyk*, Franko National University of Lviv, Ukraine*
Mykhailo Prygara*, Uzhhorod National University, Ukraine*

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Track ID - 3	Track Title	Author
Tr.3.1	Information security and monitoring of the functioning processes of local information and communication systems	Oksana Onyshchuk
Tr 3.2	A Cybersecurity Architecture for Production Data in the Digital Foundry Process	Dmytro Moroz

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Tr 3.3	A Methodology for Building Reproducible Cybersecurity Datasets for Internet of Things Devices	Cherkaskyi Oleksandr
Tr 3.4	Digital-Twin-Referenced Physical-Layer Anomaly Detection for a 1-Bit RIS in 6G Networks	Andriy Riy, Marian Kyryk, Ivan Demydov, Serhii Zablotskyi
Tr 3.5	Integration of Cgan and Federated Learning to Pro Tect Decetralized SDN Networks from Adaptive EW	Stoyko M.M., Gnidenko M.P.
Tr 3.6	Multi-level protection system and access rights separation in the mobile application	Liubomyr Botseniuk, Mykhailo Rizak
Tr 3.7	Adaptive Detection of Goal Conflics in Multi-Agent Smart Home Cyber-Physical Systems	Ihor Krestianinov
Tr 3.8	Комбінований підхід до виділення опорних точок у стегонографії зображень	Ірина Борисенко
Tr 3.9	On Modern Theoretical Aspects of the Security of Cyber-Physical Systems	Oksana Kholyavka, Nataliia Buhrii, Oleh Buhrii
Tr 3.10	Адаптивний алгоритм гамування графічної інформації	Андрій Садченко, Олег Кушніренко
Tr 3.11	GP4-WLTE 4G Controller Backdoor as an Example of Unauthorized Access Risks in Chinese Equipment	Mykola Shcherbyna, Petro Venherskyi

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Tr 3.12	Simulation of Fault Injection Attacks on a Secure Bootloader for the RISC-V Soft-IP Core (MIV_RV32) in Renode Framework	Liliia Melnychuk, Mykola Shcherbyna
Tr 3.13	Mazewall: restricting application workers on Linux	Leanid Piliptsevich
Tr 3.14	Modeling Cyber-Physical Consequences of Additive Attacks on the Control Channel of an Aerodynamic Levitation System	Oleksii Novikov, Mykola Ilin, Iryna Stopochkina, Volodymyr Duduladenko
Tr 3.15	Modeling Critical States In Cyber System Elements Based On	Hennadii Shapovalov
Tr 3.16	Integration of neural network detectors into visual odometry systems	Mykhailo Moroz
Tr 3.17	A Resilience-Loss Model for Cloud-Oriented IoT Platforms with Resource-Constrained	V. I. Voitovych, R. M. Lys
Tr 3.18	Block Data Encryption Using Polynomial Modified Fibonacci Matrice	Pavlo Grytsiuk, Yurii Hrytsiuk

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Workshop: Cryptology and Data Security

14.00-17.00 24.09,
10.00-13.00 25.09
***(Podchorążych* str *2, room 410N)*.**

Moderators:
***Oleg Gutik**, Franko National University of Lviv, Ukraine*
***Vladyslav Sokol**, National Technical University 'Kharkiv Polytechnic Institute', Ukraine*
Secretary:
***Yuriy Kuzbyt**, Franko National University of Lviv, Ukraine*
***Liliia Pushkar**, Franko National University of Lviv, Ukraine*

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Passcode: 7Vp6SD7b

Track ID - 4	Track Title	Author
Tr 4.1	Secure Processing of Open Marketing Data from Retailers' Telegram Channels: Machine Learning, Disclosure Risk, and Differential Privacy	Ihor Ponomarenko, Oleksandr Yakushev, Maryna Petchenko, Dmytro Ponomarenko

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Tr 4.2	A Prospective Cryptographic Transformation with High Avalanche Effects	Liudmila Kovalchuk, *Serhii Yakovliev*, Ihor Koriakov
Tr 4.3	Modeling the Dynamics of Trust and Self-Reproduction of Distorted Knowledge in Multi-Agent Artificial Intelligence Systems	*Dmytro Lande*, Yuriy Danyk
Tr 4.4	Generation of a Sequence of Modified Polynomial Fibonacci Matrices	Pavlo Grytsiuk, *Yurii Hrytsiuk*
Tr 4.5	Specific Features of Digital Forensics and Incident Response in Attacks on Critical Information Infrastructure	Dmytro Peleshko, *Maksym Radchenko*, Petro Venherskyi
Tr 4.6	Ecosystem of Information and Digital Security of the National Economy within the Concept of Protecting the Strategic Interests of the StateJa	Julia Bondar
Tr 4.7	Privacy-Preserving ECG Authentication via Additively Homomorphic Matching of Rhythm-Adaptive Cardiac-Cycle Templates	Roman Butsii *Serhii Lupenko*, Mikalai Leanavets, Nataliia Stadnyk
Tr 4.8	On the Signed-decomposition cipher	*Yurii Kuzbyt*, Oleg Gutik, Ivan Dyyak
Tr 4.9	From Statistical Significance to Anomaly-Detection Evidence: Address-	Olena Vynokurova,

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	Level Behavioral Analysis of Ransomware-Related Bitcoin Addresses	Victor Strelnikov, *Yaryna Kokovska*

Workshop: Artificial Intelligence for Cybersecurity

14.00-16.00 24.09,
10.00-13.00 25.09
(Podchorążych* str *2, room A1).

Moderators:
***Roman Karpiuk**, Franko National University of Lviv, Ukraine*
***Michael Kropyva**, Franko National University of Lviv, Ukraine*

Secretary:
***Yaryna Kokovska**, Franko National University of Lviv, Ukraine*
***Andrii Salyk**, Franko National University of Lviv, Ukraine*

Join Teams Meeting
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Meeting ID: 399 908 611 470 549
Passcode: s75St3M4

Track ID - 5	**Track Title**	**Author**
Tr 5.1 14.00	Development of a Causal-Temporal Model for Analyzing Dangerous Events	Oleksandr Laptiev, *Iryna Zamrii,* Ivan

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	in Web Applications Using Heterogeneous Graph Neural Networks	Shakhmatov
Tr 5.2 14.15	AI-Driven Multi-Context Trust Assessment for Detecting Anomalous Data in IoT Systems	Dmytro Karlov, *Serhii Semenov*, Beata Krzaczek, Andriy Kovalenko, Oleksii Piskarov
Tr 5.3 14.30	RAG-Augmented LLM Agents for Autonomous Penetration Testing in a Controlled Docker Environment	Olga Torstensson
Tr 5.4 14.45	Failure-Aware Trace Triage for Cost-Efficient Evaluation of AI Agents in Recurring Production Workflows	Vasyl Lyashkevych, *Andrii Salyk*
Tr 5.5 15.00	Machine Learning Methods for the Detection of Domains Generated by DGA Algorithms in Cyberattacks	Maryan Kyryk *Yurii Shpak,* Petro Venherskyi
Tr 5.6 15.15	Threat-Aware Adaptive Joint Source-Channel Coding under Jamming and Packet Injection	Olena Pyrch
Tr 5.7 15.30	Adaptive physics-informed RBF neural networks for shallow water flow simulation	*Valeriy Trushevskyy*, Yuriy Shcherbyna
Tr 5.8 15.45	Political-Systemic Criteria for the Use of Artificial Intelligence in Monitoring Information Operations During Election Campaigns	*Serhii Kondratiuk*. Yevheniia Ivanchenko

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Virtual Panel on Cybersecurity and Global Economy

16.00-17.30 24.09
Panel organizers:
Dr. Anna Shostya, *Pace University, New York City, USA*
Dr. Anatolii Davidenko, *State University of Information and Communication Technologies, Kyiv, Ukraine*
Panel Chair:
Dr. Darren Hayes, *Pace University, New York City, USA*

Join Teams Meeting
https://teams.microsoft.com/meet/399908611470549?p=c5TPSyatpQNHSdN52t
Meeting ID: 399 908 611 470 549
Passcode: s75St3M4

Track ID - 6	Track Title	Author
Tr 6.1 16.00	The growing importance of AI for cybersecurity and criminal investigations	Dr. Darren Hayes (Cybersecurity Program, Seidenberg, Pace University)
Tr 6.2 16.15	Agentic LoRA Adapter Scheduling for Multi-Step Language Model Tasks	Dmytro Peleshko, Tymofii Nasobko, Oleksii Postovyi, Olena Vynokurova

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Tr 6.3 16.30	Cybercrime and hacking "factories", as an exploitative model	Prof. Michel Schidlow (Criminal Justice Department, Dyson, Pace University)
Tr 6.4 16.45	AI-driven modeling of human mindfulness via biometric recognition	Olena Vysotska, *Anatolii Davydenko*, Oleksandr Potenko
Tr 6.5 17.00	The impact of the 2023 SEC Regulation Item 1.05 on stock price reactions to data breach announcements	Hope Brizzi'26 (Economics Department, Dyson, Pace University)
Tr 6.6 17:15	Risk Management of AI Jailbreaking.	Alex Tsekhansky (Pace University, New York City, USA)

10.00-13.00 25.09
***(Podchorążych* str *2, room A1)*.**

Track ID - 5	**Track Title**	**Author**
Tr 5.9 10:00	Cross-Layer Inconsistencies in Anti-Detect Browsers: A Reproducible Measurement of Adversarial Evasion Against Layered Bot Detection	Vladyslav Miachkov, Pashko Anatolii

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Tr 5.10 10:15	The multi-agent micro service architecture of AI based cyberdefense system for IoT device security with automated response and dynamic creation of counter-cyberattacks	Vadym Malinovskyi, Andrii Yarovyi Leonid Kuperstein
Tr 5.11 10:30	Schema-Valid JSON Is Not Sufficient for a Safe Cyber-Risk Record: Evidence-Anchored Semantic Validation and Fail-Closed Repair for Schema-Constrained LLM Pipelines	Volodymyr Artemchuk
Tr 5.12 10:45	On-Device Multi-Criteria Routing without an External Controller: Removing Control-Plane Exposure while Keeping Recovery Sub-Second	Yurii Vladarchyk, Kateryna Nesterenko
Tr 5.13 11:00	JD Detector: Benchmarking a Production AI-Generated Text Classifier Against Open-Source and Commercial Detectors	Borys Melnychuk, Dmytro Peleshko, Liubov Zatolokina, Maksym Orlianskyi
Tr 5.14 11:15	Detecting Indirect Prompt Injection Attacks in Multi-Domain Documents Using Embedding-Based Chunk Aggregation	Bianca Susa, Aswathy Njettutharayil Baby, Mahmoud Rahat
Tr 5.15 11:30	From AI Governance to an Agentic Security Operations Centre: A Staged Reference Architecture for Trusted Security Automation	Oleksandr Korchenko, Roman Karpiuk, Michael

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		Kropyva, PetroVenherskyi

Presentation of certificates

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