Programme of the 6th International Workshop on Intelligent Information Technologies & Systems of Information Security (IntelITSIS-2025)

Khmelnytskyi, Ukraine, April 4, 2025

Time regarding the Kyiv

Countries which represent authors	Time in countries regarding the time of Ukraine
China	+ 6
United States of America	- 6
United Kingdom	- 2
Poland	- 1
Czech Republic	- 1
Slovakia	- 1
Austria	- 1
Algeria	- 1
Egypt	The same
Estonia	The same

IMPORTANT!!! All Ukrainian participants of Workshop should be connected to all sessions from shelters in order to ensure uninterrupted work during air alarms! We will not stop the Workshop's sessions in case of an air alarm!

All workshop participants should have a backup connection option (charged mobile phone with a connected mobile internet) to ensure uninterrupted operation in case of emergencies – power outages, etc.

Timetable of the Workshop

Time (Kyiv)	April 4th 2025
9.00	**Welcome & Plenary Session**
9.15	Section Session 1 Intelligent Information Technologies
11.30	Coffee Break
11.45	Section Session 1 Intelligent Information Technologies
13.45	Coffee Break
14.00	Section Session 2 Systems of Information Security
17.00	Coffee Break
17.15	**Awards and Close Ceremony**

Presentation timing:
Session presentations – 10 minutes + 5 minutes Q&A **(15 minutes for 1 speaker!)**.

Testing of Connection:
April 4th, 2025, 08.45-09.00 (8.45 AM – 09.00 AM), Kyiv time

Zoom links:

Plenary session	https://us02web.zoom.us/j/82751431902?pwd=6y7zsOZ7LYinaDAEqbcDbk0uBP9gfX.1 Meeting ID: 827 5143 1902 Passcode: 2025
Session 1 Intelligent Information Technologies	https://us02web.zoom.us/j/82751431902?pwd=6y7zsOZ7LYinaDAEqbcDbk0uBP9gfX.1 Meeting ID: 827 5143 1902 Passcode: 2025
Session 2 Systems of Information Security	https://us02web.zoom.us/j/82751431902?pwd=6y7zsOZ7LYinaDAEqbcDbk0uBP9gfX.1 Meeting ID: 827 5143 1902 Passcode: 2025

Plenary Sessions' Schedule

Plenary sessions	Invited presentations
Welcome & Plenary Session **April 4th 2025** **09.00-09.15** Moderators: Tetiana Hovorushchenko, Sergii Lysenko	**09.00-09.10** *Greetings from the IntelITSIS Organizers:* **Tetiana Hovorushchenko**, Khmelnytskyi National University, Ukraine (General Chair of the Workshop) **Oleg Syniuk**, Vice-Rector of Khmelnytskyi National University, Ukraine **Sergii Lysenko**, Khmelnytskyi National University, Ukraine (International Program Committee Chair) **Yelyzaveta Hnatchuk**, Khmelnytskyi National University, Ukraine (Organizing Committee Chair) **09.10-09.15** *Trends of the IntelITSIS-2025* **Tetiana Hovorushchenko**, Khmelnytskyi National University, Ukraine
Awards and Close Ceremony **April 4th 2025** **17.15-17.30** Moderators: Tetiana Hovorushchenko, Sergii Lysenko	**17.15-17.30** *Awards and Close Ceremony*

Section Sessions' Schedule

Section Sessions	Presentations
Section Session 1 Intelligent Information Technologies **April 4th 2025** **09.15-11.30** Moderators: **Tetiana Hovorushchenko**, Yelyzaveta Hnatchuk, Olga Pavlova	Oleg Voichur, Olha Hovorushchenko, Artem Boyarchuk, Yurii Voichur and Anatoliy Nester *Method of preprocessing information for preparing a description of art objects using artificial intelligence* Dmytro Borovyk, Oleksandr Barmak and Iurii Krak *Detection of military targets from images using deep learning models* Bohdan Durnyak, Petro Shepita, Lyubov Tupychak, Arsen Syvak and Oleksandr Bohonis *Fuzzy model of knowledge assessment in inclusive education information systems* Tetiana Hovorushchenko, Vitalii Alekseiko, Vitaly Levashenko, Yurii Voichur and Dmytro Medzatyi *Sea Ice Extent data analysis using statistical and unsupervised learning methods* Serhiy Balovsyak, Ihor Fodchuk, Zhengbing Hu, Inna Iakovlieva, Serhii Yakovliev *Automatic bilateral filtering of digital X-ray rocking curves using histograms* Serge Dolgikh, Oksana Mulesa and Volodymyr Sabadosh *Iterative Fuzzy-Prototype Conceptualization of Multifactorial Constrained Prior Data Spaces for Intelligent Decision Systems* Oleksandr Kyrychenko, Sergey Ostapov and Oksana L. Kyrychenko *Predictive autoscaling in AWS Serverless by means of machine learning and SQS Metrics* Zoryana Selmenska, Zoreslava Plakhtyna, Myroslava Dubnevych and Orest Khamula *Model of the hierarchy of quality factor criteria layout processes* Tetiana Hovorushchenko, Artem Boyarchuk, Olga Pavlova, Sergii Lysenko and Mariusz Mazurkiewicz *Information-diagnostic online SMART platform utilizing an open-source virtual learning environment*
Section Session 1 Intelligent Information Technologies **April 4th 2025** **11.45-13.45**	Andrii Shupta, Olexander Barmak, Pavlo Radiuk and Iurii Krak *Feature Computation Procedure for Fake News Detection: An LLM-Based Extraction Approach* Serhiy Balovsyak, Nazar Hrynyk, Zhengbing Hu, Khrystyna Odaiska and Ivanna Yanchuk *Improving accuracy of photogrammetry method using image segmentation by YOLO neural networks*

Moderators: Tetiana Hovorushchenko, Yelyzaveta Hnatchuk, **Olga Pavlova**	Vsevolod Senkivskyy, Iryna Pikh, Alona Kudriashova, Roman Andriiv and Nazarii Senkivskyi *Evaluation of methods for intellectual analysis of manipulative content in the information space* Volodymyr Kysil, Olga Drachuk, Anatolii Korol, Valentyna Hnenna and Elena Zaitseva *Liminal efficiency for AI general models: investigating compression techniques for maximized performance in the glaucoma's diagnosis and prognosis* Vitalii Alekseiko, Houda El Bouhissi, Valeriia Shvaiko and Andrii Kuzmin *Web-based information system for land surface temperature forecasting: its role in the context of the ecological imperative and educational challenges of the digital society* Anatoliy Sachenko, Victoria Vysotska, Serhii Vladov, Nataliia Vladova and Danylo Shved *Intelligent method for the helicopter turboshaft engines gas temperature determining under rapid changes in its values conditions* Olga Pavlova, Andrii Kuzmin, Mariia Kostiuk, Oleksandr Khlevnoi and Houda El Bouhissi *Computer vision-based information system for landfill fire detection* Alona Kudriashova, Iryna Pikh, Vsevolod Senkivskyy, Taras Oliyarnyk and Oleksii Bilyk *Designing an intelligent system for digital image classification*
Section Session 2 Systems of Information Security **April 4th 2025** **14.00-17.00** Moderators: Oleh Savenko, **Sergii Lysenko**, Andrii Nicheporuk	Viacheslav Kovtun, Oksana Kovtun, Tetiana Gryshchuk, Maria Yukhimchuk *Adaptive Management of Communication Resource Allocation in High-Load 5G Infrastructures: A Queuing-Based Approach* Volodymyr Sabat, Oleksandr Tymchenko, Myroslava Kulynych, Volodymyr Kuhot and Pavlo Hibey *Selection of models for operational management of hierarchically structured systems under threats* Oleksandr Tymchenko, Bohdana Havrysh, Orest Khamula and Volodymyr Chornyak *Modeling and adapting network databases for complex data structures* Bohdan Semeniuk, Antonina Kashtalian, Dmytro Martiniuk, Andriy Drozd and Abdel-Badeeh M. Salem *Detection of computer attacks based on sonification of network traffic* Yuriy Stetsyuk, Mykola Stetsyuk, Bohdan Savenko, Andrzej Kwiecien, Lukasz Kopania *Method of random dynamic control transfer between network nodes for a partially centralized OS security system* Mykola Stetsiuk, Volodymyr Anikin, Olena Pyrch, Oleksandr Kozelskiy and Abdel-Badeeh M. Salem *Method of detecting anomalies in IOT device traffic based on statistical analysis using the modified z score*

	Petro Shepita, Bohdan Durnyak, Yurii Petriv, Mykhailo Yasinskyi and Viktor Troyan *Cybersecurity of robotic sorting systems of warehouse assets of a printing company* Oleksandr Huralnyk, Oleg Savenko, Vadym Paiuk, Olexandr Klein, Oleksii Lyhun *Method and Means of Critical Information Processing in Corporate Networks* Maxim Prodeus, Andrii Nicheporuk, Antonina Kashtalian, Mariia Kapustian, Tomas Sochor *Honeypot-based monitoring, detection, response, and information protection framework* Dmytro Denysiuk, Oleg Savenko and Miroslav Kvassay *Method for Detecting Malicious Commands Transmitted via Images Using Steganography* Serhii Svystun, Oleksandr Melnychenko, Pavlo Radiuk, Andrii Lysyi and Anatoliy Sachenko *Determining the Criticality Assessment of Defects on Wind Turbine Components Detected by UAV Sensors* Oleksandr Bokhonko, Sergii Lysenko and Tomas Sochor *Model of a distributed heterogeneous system resistant to leakage of confidential information*