Programme of the 2nd International Workshop on Advanced Applied Information Technologies: AI & DSS (AdvAIT-2025)

Khmelnytskyi, Ukraine, December 5, 2025

Time regarding the Kyiv

Countries which represent authors	Time in countries regarding the time of Ukraine
Slovakia	- 1
United Kingdom	- 2
Poland	- 1
Czech Republic	- 1
Austria	- 1
Estonia	The same
Egypt	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)	December 5th 2025
9.30	**Welcome & Plenary Session**
9.45	Session Section
11.45	Coffee Break
12.00	Session Section
14.00	Coffee Break
14.15	Session Section
16.45	Coffee Break
17.00	**Awards & Close Ceremony**

Presentation timing:

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

Testing of Connection:

December 5th, 2025, 09.15-09.30 (9.15 AM – 09.30 AM), Kyiv time

Zoom links:

Welcome & Plenary Session	**https://us02web.zoom.us/j/6128070280?pwd=cWxHdzg0RVVablc5emZ2VGllRjY2dz09** **Meeting ID: 612 807 0280** **Passcode: 545366**
Session Section	**https://us02web.zoom.us/j/6128070280?pwd=cWxHdzg0RVVablc5emZ2VGllRjY2dz09** **Meeting ID: 612 807 0280** **Passcode: 545366**
Awards & Close Ceremony	**https://us02web.zoom.us/j/6128070280?pwd=cWxHdzg0RVVablc5emZ2VGllRjY2dz09** **Meeting ID: 612 807 0280** **Passcode: 545366**

Plenary sessions	Invited presentations
Welcome & Plenary Session **December 5th 2025** **09.30-09.45** Moderators: Tetiana Hovorushchenko, Sergii Lysenko	**09.30-09.40** *Greetings from the AdvAIT Organizers:* **Tetiana Hovorushchenko**, Khmelnytskyi National University, Ukraine (General Chair of the Workshop) **Elena Zaitseva**, University of Zilina, Slovakia (General Chair of the Workshop) **Oleg Syniuk**, Vice-Rector of Khmelnytskyi National University, Ukraine **Sergii Lysenko**, Khmelnytskyi National University, Ukraine (International Program Committee Chair) **Vitaly Levashenko**, Zilina University, Slovakia (International Program Committee Chair) **Olga Pavlova**, Khmelnytskyi National University, Ukraine (Organizing Committee Chair) **09.40-09.45** *Trends of the AdvAIT-2025* **Tetiana Hovorushchenko**, Khmelnytskyi National University, Ukraine
Awards and Close Ceremony **December 5th 2025** **17.00-17.15** Moderators: Tetiana Hovorushchenko, Sergii Lysenko	**17.00-17.15** *Awards and Close Ceremony*

Session Section	Presentations
Session Section **December 5th 2025** **09.45-11.45** Moderators: **Tetiana Hovorushchenko,** Olga Pavlova	Orest Khamula, Oleksandr Tymchenko, Olha Sosnovska, Svitlana Vasiuta and Olha Lukovska *Cognitive analysis of information perception through images* Alla Herts, Marta Kravchyk, Yelyzaveta Hnatchuk, Archil Chochia and Artem Boyarchuk *Decision support system for inheritance under martial law* Oleg Voichur, Anastasiia Shcherbakova, Oksana Zakharkevich, Yurii Voichur and Miroslav Kvassay *VR simulator for the training and manufacturing process at sewing enterprises* Ilona Dumanska, Andrii Kuzmin, Vitaly Levashenko, Viktor Lysak and Lesia Hrytsyna *Machine Learning Models for Predicting Migrant Remittance Flows: A Cross-Border Financial Analysis* Olga Pavlova, Alla Herts, Volodymyr Tsikalo, Archil Chochia and Yevhenii Rudnichenko *Method for supporting decision-making regarding the possibility of transporting goods by road based on civil law grounds* Alona Kudriashova, Vsevolod Senkivskyy, Iryna Pikh, Bohdan Durnyak and Taras Oliyarnyk *Information system for determining the priority of digital image quality factors* Tetiana Hovorushchenko, Oleg Voichur, Serhii Matiukh, Artem Boyarchuk and Olha Hovorushchenko *Method for creating AI-personas and prompts to describing art objects for people with visual impairments* Alona Kudriashova, Iryna Pikh, Vsevolod Senkivskyy, Yurii Slipetskyi and Volodymyr Bernatsek *Evaluation of the quality of compositional design of information systems using fuzzy logic*
Session Section **December 5th 2025** **12.00-14.00** Moderators: **Olga Pavlova,** Tetiana Hovorushchenko	Oleksandr Tymchenko, Bohdana Havrysh, Orest Khamula and Dmytro Palamarchuk *Developing an algorithm for decision support process* Vasyl Teslyuk, Iryna Gado and Serhii Trevoho *Model for risk assessment and agile method selection considering social factors in IT projects* Roman Vit, Olexander Mazurets, Olexander Barmak, Maryna Molchanova and Iurii Krak *Identifying Users Communicative Segments to Explain Digital Fatigue via NLP*

		Oleksandr Khlevnoi, Nataliia Zhezlo-Khlevna, Yurii Borzov, Yuliia Nazar and Volodymyr Pylypenko *Machine Learning-Based Study of Fire Evacuation Parameters in Inclusive Secondary Schools* Oleksandr Chaban, Eduard Manziuk, Pavlo Radiuk, Elena Zaitseva and Olena Markevych *Intelligent Information System for Knowledge Integration into Artificial Intelligence Models* Yaroslav Kolyano, Bohdan Durnyak, Taras Sass and Georgij Petriaszwili *Models of Unsteady Convective and Conductive Heating of Double-Layer Printing Materials* Oleksandr Khlevnoi, Nataliia Zhezlo-Khlevna, Igor Malets, Olga Smotr and Roman Golovatyi *Machine Learning Method for Predicting Smoke Blockage Time at Apartment Evacuation Exits* Ilona Dumanska, Olga Pavlova, Jan Rabcan, Alona Melnyk and Olena Kharun *Financial Risk and Customs Control in Humanitarian Water Logistics: A Machine Learning Approach*
Session Section **December 5th 2025** 14.15-16.45 Moderators: **Sergii Lysenko**, Andrii Nicheporuk		Vira Titova, Yurii Klots, Viktor Cheshun, Serhii Mostovyi and Abdel-Badeeh M. Salem *Expert Access Control System for Access Management in a Smart Home System* Dmytro Tymoshchuk, Andrii Voloshchuk, Andriy Sverstiuk, Halyna Osukhivska and Oksana Bahrii-Zaiats *Machine Learning-Based Information Technology for Analyzing Energy Peaks in Power Grid Balancing* Oleg Savenko, Silvia Lips, Piotr Gaj and Yevhenii Sierhieiev *Graph-based Data Preparation for Detecting Buffer Overflow Vulnerabilities in Code within CI/CD Pipelines* Dmytro Tymoshchuk, Nataliya Zagorodna, Yurii Klots, Vasyl Yatskiv and Nataliia Petliak *AutoML and Explainable AI-Based Approach to Enhance the Efficiency and Interpretability of IDS* Artem Kachur, Sergii Lysenko, Tomas Sochor, Olha Atamaniuk and Yurii Kravchyk *Experimental Validation of a Synthesis Method for Resilient AR/VR Architectures* Petro Stukhliak, Oleg Totosko, Danylo Stukhliak, Iaroslav Lytvynenko and Roman Zolotyi *Study of structural parameters of epoxy composites using deep neural networks*

	Leonid Romaniuk, Sergey Subbotin, Ihor Chykhira, Olesya Shtanyuk and Halyna Tulaidan *Analysis of methods and models for implementing databases and web interfaces: a case study of student management information systems* Vitaly Brevus, Halyna Brevus, Roman Gashynskyi, Aser Kashosi and Roman Yuzefovych *AI-driven multimodal data fusion for hazardous object detection in maritime and coastal environments* Ostap Stets, Ihor Konovalenko, Andrii Bomba and Oleh Shmanko *Mobile face anti-spoofing through privileged multi-teacher distillation under SWAP constraints* Mykhaylo Palamar, Mykhaylo Strembitskyi, Oleg Ulyanov, Myroslava Yavorska and Andriy Palamar *Information system for analyzing the movement of complexly identifiable objects against a stationary background*