



November 19 - 20, 2025, Bratislava, Slovakia Republic

<https://science.lpnu.ua/iddm-2025>

CONFERENCE PROGRAMME



Comenius University Bratislava,
Slovakia



Lviv Polytechnic National University,
Ukraine



Linnaeus University,
Sweden



National University "Zaporizhzhia Polytechnic",
Ukraine



New Western University,
USA



Kyiv Aviation Institute,
Ukraine

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General IDDM 2025 Timetable

November 19

10:00 – 11:00 Kyiv time	Registration and arrival of guests Link: https://us06web.zoom.us/j/88566196609
11:00 – 11:30 Kyiv time	Conference Official Opening Prof. Nataliya Shakhovska, Rector of Lviv Polytechnic National University IDDM2025 Chair Prof. Nataliya Kryvinska, Full Professor of Comenius University Bratislava IDDM2025 Co-Chair Jaime Campos, PhD, Associate Professor of Linnaeus University IDDM2025 Co-Chair
11:30 – 12:00 Kyiv time	Oleh Bereziuk, Head of the Mental Health Department at the UNBROKEN Center.
12:05 – 12:15 Kyiv time	Signing of a Collaboration Agreement with Lviv Polytechnic National University and MNE "1st Territorial Medical Association of Lviv
12:15 – 12:45 Kyiv time	Oleg Kasatka, MD, founder of the Ukrainian Sports Clinic. New generation medical analytics: information and technological tools for a comprehensive assessment of the condition of an athlete's musculoskeletal system.
12:45 – 13:30 Kyiv time	Coffee Break Enjoy coffee and small refreshments alongside with networking and individual discussions. Do not miss investigating the poster area.
13:30 – 14:00 Kyiv time	Serge Dolgikh – PhD, Solana Networks, Canada, Responsible AI in modern society.
14:00 – 14:30 Kyiv time	Andriy Petlyovany, Principal Architect, GlobalLogic - Medical Data Collection Challenges.
14:30 – 15:00 Kyiv time	Yurii Chyrka, Head of ML, It-Jim - Applications of AI and Computer Vision in Medical Diagnosis

November 20

10:00 – 13:00 Kyiv time	Session 1 Link: https://us06web.zoom.us/j/87865301195
14:00 – 16:30 Kyiv time	Session 2 Link: https://us06web.zoom.us/j/85282237204

Chairman: Oleh Basystiuk, Link: <https://us06web.zoom.us/j/87865301195>

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|---------------|---|
| 10.00 – 10.15 | Vladyslav Moskal, Natalia Melnykova, Oleg Kasatka, Yana Totska, Yaroslav Medvid
<i>Automated Aggregation and Analysis of Heterogeneous Medical Reports for Clinical Decision Support in Sports and Physical Rehabilitation Medicine</i> |
| 10.15 – 10.30 | Tetiana Hovorushchenko, Olha Hovorushchenko, Anatolii Korol, Valentyna Hnenna, Elena Zaitseva
<i>Mobile-oriented information technology for psycho-emotional screening with algorithms for decision-making and patient routing at the primary healthcare level</i> |
| 10.30 – 10.45 | Oleh Pitsun, Vasyl Koval, Nadiya Savka, Hanna Poperechna
<i>Hybrid MLOps pipelines with DataOps, ModelOps, and AIOps integration in scalable medical systems</i> |
| 10.45 – 11.00 | Yurii Palianytsia, Roman Nikolaichuk, Vasyl Dunets, Andriy Sverstiuk, Lyubomyr Mosiy
<i>Adaptive windowed synphase analysis of ECG signals as periodically correlated random processes</i> |
| 11:00 – 11:15 | Faycal Touazi, Djamel Gaceb, Tayeb Benzenati, Faycal Arioua, Ibtissem Telkhokh, Nour Elhouda Magaz
<i>Accurate Breast Lesion Segmentation in MRI via YOLO-Based Localization and Deep Learning</i> |
| 11:15 – 11:30 | Oksana Dozorska, Oleg Zastavnyy, Leonid Dediv, Bohdan Yavorskiy, Halyna Tsupryk, Andrii Prodan
<i>The method of tactile sensors signals processing in bionic hand prosthesis</i> |
| 11:30 – 11:45 | Inna Rozlomii, Andrii Yarmilko, Serhii Naumenko
<i>A model for secure data streaming in medical sensor networks taking into account limited device resources</i> |
| 11:45 – 12:00 | Ihor Dumyn, Adrian Nakonechnyi
<i>Enhanced One-Class Anomaly Detection in ECG Signals using Synergistic Wavelet and Statistical Features</i> |
| 12.00 – 12.15 | Oleksandr Chaban, Eduard Manziuk, Pavlo Radiuk, Olena Markevych, Sergii Petrovskyi
<i>Knowledge-Integrated Graph Networks for Interpretable Cardiac MRI Analysis</i> |
| 12.15 – 12.30 | Anastasiia Kudybovska, Volodymyr Shymanskyi
<i>Smart System for Skin Diseases Classification Using Convolutional Neural Networks and Explainable AI Techniques</i> |
| 12:30 – 12:45 | Mykhaylo Shcherbatyy, Yuriy Yashchuk, Yaryna Borysiuk
<i>Surrogate Modeling and Optimization of Epidemic Dynamics using Radial Basis Functions</i> |

- 12:45 – 13:00 Roman Tkachenko, Ivan Izonin, Mykola Tataryn, Kyrylo Yemets, Yevgeniy Bodyanskiy, Iurii Krak
ARMC: Analytical Radial Mapping via Cosine Similarity for Interpretable Nonlinear Feature Generation
- 13:00 – 13:15 Roman Mysiuk, Conor O'Siadhail, Liliia Lyashkevych, Petro Kulyk, Iryna Mysiuk
Hierarchical Classifier Implementation upon YOLOv8 and Synthetic Data Usage for Medical Instruments
- 13:15 – 13:30 Oksana Mulesa, Tamara Radivilova, Lyudmyla Kirichenko, Igor Povkhan, Vasyl Poida
Adaptive entropy indicators for workforce analysis in healthcare: a small data perspective
- 13:30 – 13:45 Yaroslav Sokolovskyy, Volodymyr Bereziuk, Olha Mokrytska
Application of Fractal Operators and Neural Networks for Improving the Textures of Magnetic Resonance Tomographic Images
- 13:45 – 14:00 Serhii Lupenko, Lyubomyr Mosiy, Andriy Sverstiuk, Oksana Bahrii-Zaiats, Volodymyr Machogan
Diagnostic signs for analysis of the functional state of the human cardiovascular system

November 20, Session 2

Chairman: Oleh Basystiuk, Link: <https://us06web.zoom.us/j/85282237204>

- 14:00 – 14:15 Oleh Berezhsky, Mykola Berezhkyi, Pavlo Liashchynskyi, Petro Liashchynskyi, Grygoriy Melnyk
Estimating the number of iterations needed for biomedical image synthesis to achieve a given classification accuracy
- 14:15 – 14:30 Taras Dubyniak, Andrii Bomba, Mykhaylo Strembitskyi, Yuri Nakonetchnj, and Oles Hospodarskyi
Autonomous robotic platform for transporting emergency medical equipment
- 14:30 – 14:45 Roman Mysiuk, Petro Kulyk, Vasyl Lyashkevych, Roman Shuvar, Dmytro Kulieshov
The Hidden Pitfalls in Deep Learning-Based Identification of Medical Tools
- 14:45 – 15:00 Lesia Mochurad, Illia Beleikanych, Yulianna Mochurad
Optimized Ensemble Classifier for Cardiovascular Disease Prediction Based on Boosting Models and XAI
- 15:00 – 15:15 Volodymyr Stefanyshyn, Oleh Pastukh, Oleg Lyashuk, Vasyl Yatsyshyn, Yuriy Ushenko
KAN-based EEG signal classification for resource constrained neurocomputer interfaces
- 15:15 – 15:30 Oleh Pitsun
From AI Approaches For Image Analysis To Cloud Deployment
- 15:30 – 15:45 Heorhii Mykhed, Pavlo Horun
Ensemble of Specialized Detectors for Multi-Scale Object Detection in Remote Sensing Imagery
- 15:45 – 16:00 Mykola Butkevych, Dmytro Chumachenko
Forecasting Acute Hepatitis C in Ukraine with a Compact LSTM

- 16:00 – 16:15 Eugene Fedorov, Tetyana Utkina, Olga Nechyporenko, Maryna Leshchenko, Kostiantyn Rudakov
Method for diagnosing the condition of chicken eggs based on associative artificial neural networks
- 16:15 – 16:30 Mykola Butkevych, Dmytro Chumachenko
Forecasting Acute Hepatitis C in Ukraine with a Compact LSTM

November 20, Close ceremony.

Chairman: Oleh Basystiuk

TIME FOR PRESENTATIONS

Paper presentation – 10 min.

Discussion, questions – 5 min.



IDDM 2025

**The 8th International Conference on
Informatics & Data-Driven Medicine**

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