Table of Contents

# ExplAI-2025: Advanced AI in Explainability and Ethics for the Sustainable Development Goals

**Location:** Khmelnytskyi, Ukraine  
**Date:** 4 April 2025  
**Time zone:** Kyiv time — EEST (UTC+3) on the workshop date  
**Presentation policy:** 10-minute talk + 5-minute Q&A (15 minutes/slot)  
**Connectivity & safety:** Sessions proceed during air alarms; Ukrainian participants connect from shelters; everyone keeps a backup connection.  
**Meeting (all sessions):** Link TBA • Meeting ID TBA • Passcode TBA

**Moderator for every slot below:** Pavlo Radiuk

| Time (Kyiv) | Duration | Track / Session | ID | Paper Title | Authors (first + last names only) | Presenter | Moderator | Notes / Link |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 09:00–09:15 | 15m | Welcome & Plenary | — | Opening and logistics | — | — | Pavlo Radiuk | Meeting link: TBA |
| 09:15–09:30 | 15m | Explainable AI | 2 | AutoML PyCaret and SHAP Explainable AI for ECG Signal Classification Based on Amplitude Variability | Dmytro Tymoshchuk; Iryna Didych; Andriy Sverstiuk; Lyubomyr Mosiy; Yuri Palianytsia | TBA | Pavlo Radiuk | Link TBA |
| 09:30–09:45 | 15m | Explainable AI | 8 | CNNs are Explainable Domain-Specific Visual Embedders | Zakhar Ostrovsky; Andrii Biloshchytskyi; Dmytro Uhryn | TBA | Pavlo Radiuk | Link TBA |
| 09:45–10:00 | 15m | Explainable AI | 14 | Neural Network Detection of Digital Fatigue and Burnout with Interpretable Thematic Segmentation | Olexander Mazurets; Roman Vit; Maryna Molchanova; Olena Sobko; Adam Wierzbicki; Dmytro Chumachenko | TBA | Pavlo Radiuk | Link TBA |
| 10:00–10:15 | 15m | Explainable AI | 15 | Vision Transformers Transfer Learning for Smoking Detection in Public Spaces with Transparent AI Decisions | Olexander Mazurets; Maryna Molchanova; Olha Zalutska; Ihor Kok; Vitaly Levashenko; Abdel-Badeeh M. Salem | TBA | Pavlo Radiuk | Link TBA |
| 10:15–10:30 | 15m | Coffee Break | — | — | — | — | Pavlo Radiuk | Refreshments |
| 10:30–10:45 | 15m | AI Ethics & Governance | 13 | A Method for Synthesising System Architecture for IT Infrastructure Resistant to Social Engineering Attacks | Sergii Lysenko; Oleksandr Bokhonko; Tomas Sochor; Olha Atamaniuk; Nadiia Lysenko; Jiri Balej | TBA | Pavlo Radiuk | Link TBA |
| 10:45–11:00 | 15m | AI Ethics & Governance | 16 | Verifiable by Construction: Evidence-Anchored LLMs for Explainable Fake News Detection | Andrii Shupta; Pavlo Radiuk; Miroslav Kvassay; Piotr Gaj | TBA | Pavlo Radiuk | Link TBA |
| 11:00–11:15 | 15m | AI Ethics & Governance | 17 | An Approach to Identifying Functional and Non-Functional Requirements in IT-Project Management Using Deep Learning Models | Ruslan Bahrii; Tetiana Skrypnyk; Bohdan Romanov; Elena Zaitseva; Houda El Bouhissi; Volodymyr Lytvynenko | TBA | Pavlo Radiuk | Link TBA |
| 11:15–11:30 | 15m | Coffee Break | — | — | — | — | Pavlo Radiuk | Refreshments |
| 11:30–11:45 | 15m | Sustainable Development Goals | 3 | Explainable Artificial Intelligence Foundations for Web-Based Sea Ice Extent Forecasting System | Tetiana Hovorushchenko; Olga Pavlova; Vitalii Alekseiko; Oleg Voichur; Valeriia Shvaiko; Artem Boyarchuk | TBA | Pavlo Radiuk | Link TBA |
| 11:45–12:00 | 15m | Sustainable Development Goals | 5 | Detection of Intestinal Thrombosis Using a Hybrid Method Based on Genetic Algorithm and Grey Wolf Optimisation | Victoria Vysotska; Dmytro Uhryn; Yuriy Ushenko; Oleksii Iliuk; Oleh Pastukh | TBA | Pavlo Radiuk | Link TBA |
| 12:00–12:15 | 15m | Sustainable Development Goals | 19 | A Benchmark Methodology for Urban Traffic Pattern Clustering Using SUMO-Based Expert-Verified Ground Truth | Eduard Manziuk; Vitaliy Pavlyshyn; Adnène Arbi; Nebojsa Bacanin; Iurii Krak | TBA | Pavlo Radiuk | Link TBA |
| 12:15–12:30 | 15m | Sustainable Development Goals | 20 | Knowledge Engineering Information Technology for Cultural-Educational Scenarios Based on RAG | Khrystyna Lipianina-Honcharenko; Nazar Melnyk; Myroslav Komar; Pavlo Bykovyy; Khrystyna Yurkiv | TBA | Pavlo Radiuk | Link TBA |
| 12:30–12:45 | 15m | Coffee Break | — | — | — | — | Pavlo Radiuk | Refreshments |
| 12:45–13:00 | 15m | Trustworthy AI | 4 | An Explainable Artificial Intelligence Approach for Detecting Network Attacks | Dmytro Tymoshchuk; Andriy Sverstiuk; Yurii Klots; Nataliia Petliak; Vira Titova | TBA | Pavlo Radiuk | Link TBA |
| 13:00–13:15 | 15m | Trustworthy AI | 7 | An Approach to Matching Satellite and UAV Images for Visual Place Recognition Using Color Normalization and YOLO | Volodymyr Vozniak; Yuriy Ushenko; Orken Mamyrbayev | TBA | Pavlo Radiuk | Link TBA |
| 13:15–13:30 | 15m | Trustworthy AI | 9 | Hierarchical Neural Network Model for Identifying Similar Objects in Drone Images | Dmytro Borovyk; Oleksander Barmak; Pawel Komada; Sergii Babichev | TBA | Pavlo Radiuk | Link TBA |
| 13:30–13:45 | 15m | Trustworthy AI | 18 | Linear Ensemble Model with Winner-Takes-All Aggregation Strategy for Improved Small-Data Classification | Ivan Izonin; Roman Tkachenko; Serhii Chesanov; Yaroslav Tolstyak; Myroslav Stupnytskyi | TBA | Pavlo Radiuk | Link TBA |
| 13:45–14:00 | 15m | Coffee Break | — | — | — | — | Pavlo Radiuk | Refreshments |
| 14:00–14:15 | 15m | Awards & Close | — | Awards, closing remarks, next steps | — | — | Pavlo Radiuk | Meeting link: TBA |