Modern Data Science Technologies Doctoral Consortium Programme 15-16 June 2025

Department of information systems and networks, Lviv Polytechnic National University, Mytropolyta Andreya st., 5, 4th educational building, room 124

15 June 2025	
up to 09:00	registration of participants
09:00 - 09:30	at the opening of the Doctoral Consortium
09:30 – 10:00	Andrii Berko, Vladyslav Alieksieiev, Andrii Holovko. Syntax-aware tokenizer for Go code style analysis
10:00 – 10:30	Vita Kashtan, Volodymyr Hnatushenko, Maksym Ovcharenko, Artem Ivanko. A hybrid neural network architecture for semantic-contextual analysis of emotions in social media
10:30 – 11:00	Coffee Break
11:00 – 11:30	Rostyslav Fedchuk, Victoria Vysotska. Mathematical model of a decision support system for identification and correction of errors in Ukrainian texts based on machine learning
11:30 – 12:00	Vasyl Teslyuk, Iryna Gado, Bohdan Fylypchuk, Andrii Koval. Methods and tools for automated adaptive traffic light control based on computer vision
12:00 – 12:30	Viktoriia Hnatushenko, Anna Zhurba, Andrew Zimoglyad, Kateryna Ostrovska. Research on environmental changes based on fractal characteristics of satellite images
12:30 – 13:00	Coffee Break
13:00 – 13:30	Andrii Berko, Vladyslav Holdovanskyi. Continuous-categorical feature dependence with Determination-based correlation coefficient
13:30 – 14:00	Yuliia Kostiuk, Pavlo Skladannyi, Volodymyr Sokolov, Maksym Vorokhob. Models and technologies of cognitive agents for decision-making with integration of artificial intelligence
14:00 – 14:30	Nataliya Boyko, Yaroslav Borys. Intelligent systems for recognizing artistic styles: a Deep Learning approach
14:30 – 15:00	Coffee Break
15:00 – 15:30	Viacheslav Kovtun, Victoria Vysotska, Oksana Kovtun. Contextual- formal concept of creating explainable models for corpus linguistics tasks
15:30 – 16:00	Ihor Berizka, Ivan Karbovnyk. Computational evaluation of logistic potential fields in real-time obstacle navigation
16 June 2025	
09:00 – 09:30	Vasyl Teslyuk, Olga Narushynska, Maksym Arzubov, Danylo Prots. End-to-end development of a retrieval-augmented large language model for cloud-based healthcare applications
09:30 – 10:00	Kyrylo Smelyakov, Stanislav Danylenko, Anastasiya Chupryna, Victoria Vysotska. Parametric configuration approach of a multidimensional content-based image retrieval model

10:00 – 10:30	Mariya Nazarkevych, Rostyslav Yurynets, Zoryna Yurynets.
	Forecasting credit risk using multinomial logistic regression
10:30 - 11:00	Coffee Break
11:00 – 11:30	Taras Basyuk, Andrii Vasyliuk. Development of a microcontroller-
	based climate control system using neural network technologies
11:30 – 12:00	Victoria Vysotska, Iryna Kyrychenko, Vadym Demchuk. Adaptive
	issue detection in holistic optimization of distributed data streaming
	systems
12:00 – 12:30	Ihor Chushchak, Vasyl Andrunyk. Modeling an AI-driven adaptive
	learning platform for students with special educational needs
12:30 – 13:00	Coffee Break
13:00 – 13:30	Anatoly Sachenko, Bohdan Derysh, Lesia Dubchak, Svitlana
	Sachenko, Oksana Chereshnyuk. Real-time military vehicle
	classification via convolutional neural networks
13:30 – 14:00	Serhii Vladov, Nataliia Vladova, Victoria Vysotska, Vasyl Lytvyn,
	Mykhailo Luchkevych, Kateryna Surkova. Intelligent adaptive
	model of helicopter turboshaft engines gas temperature sensor
	thermocouple
14:00 – 14:30	Anatoliy Sachenko, Petro Vizhevskyi, Oleg Savenko, Viktor
	Ostroverkhov, Bogdan Maslyyak. Modern strategies for data leak
	detection and prevention in corporate networks
14:30 – 15:00	Coffee Break
15:00 – 15:30	Volodymyr Hnatushenko, Vita Kashtan, Oleksii Kazymyrenko.
	Information technology for detecting cars on aerial imaging using a
	modified YOLO-OBB architecture
15:30 – 16:00	Serhii Vladov, Anatoliy Sachenko, Nataliia Vladova, Victoria
	Vysotska, Sergii Grodskyi, Maclej Dobrowolski. Intelligent method
	of measuring gas temperature of helicopter turboshaft engines with
	model error compensation
16:00 - 17:00	Round table and closing ceremony