

**Program
of the Modern Data Science Technologies Workshop (MoDaST 2024)**

Central European Summer Time – CEST

May 31 2024
St. Metropolitan Andrey Street 5, Lviv, Ukraine
4th building at LPNU, room 124

12.00 – 13.00
Workshop Opening and Plenary Section
Session Chair: **Michael Emmerich**

Join Zoom Meeting:
<https://us04web.zoom.us/j/8432530863?pwd=bFkyZGszbUUrak0hqbXlIVlidaTGR5dz09&omn=75465836938>
Meeting ID: 843 253 0863
Passcode: 804722

12.00 – 13.00	Conference Opening and Plenary Section
12.20 – 12.40	<i>Yingije Fan.</i> Multi-objective hybrid vehicle routing problems with multiple time Windows
12.40 – 13.00	<i>Vitor Basto Fernandes.</i> Multicriteria optimization benchmarking knowledge engineering

St. Metropolitan Andrey Street 5, Lviv, Ukraine
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13.00 – 18.00
Main Workshop Section
Session Chair: **Dmytro Dosyn**

Join Zoom Meeting:
<https://us05web.zoom.us/j/81219976703?pwd=qKhIPOSXitqXlglmLkpKPFQcuhTrOa.1>
Meeting ID: 812 1997 6703
Passcode: 9ncqzt

13.00 – 13.20	<i>Volodymyr Riznyk, Roman Sydorenko.</i> Optimal multifactorial planning of experiments based on the combinatorial configurations MCDM
13.20 – 13.40	<i>Vasyl Lytvyn, Victoria Vysotska, Sergey Tyshko, Oleksandr Lavrut, Tetiana Lavrut, Mariia Nazarkevych.</i> Diagnostic method development when weapons characteristics measuring based on spectral analysis for signals phase shift determination
13.40 – 14.00	<i>Olexander Belej, Yulian Fedirko, Oleksandr Markelov.</i> Ensuring accuracy of personal data processed in blockchain systems
14.00 – 14.20	Coffee Break
14.20 – 14.40	<i>Maksym Vakulenko, Vadym Slyusar.</i> An approach to the reverse dictionary task based on automatic smart subword segmentation of Ukrainian physical texts
14.40 – 15.00	<i>Dmytro Dosyn, Oleksiy Oletsky.</i> An approach to modeling elections in bipartisan democracies on the base of the “state-probability of action” model
15.00 – 15.20	<i>Olha Yanholenko, Andrii Kopp, Dmytro Orlovskiy, Uliya Litvinova.</i> Towards algorithmic and software solution for business process model analysis and correction

15.20 – 15.40	<i>Vasyl Lytvyn, Anna V. Bakurova, Oleh V. Zaritskyi, Anatoliy A. Gritskevich, Pavlo V. Hrynchenko, Elina V. Tereschenko, Dmytro V. Shyrokorad.</i> Fuzzy logic-based methodology for building access control systems based on fuzzy logic
15.40 – 16.00	<i>Volodymyr Pasichnyk, Nataliia Kunanets, Valentyna Yunchyk, Maria Khomyak, Anatolii Fedonyuk, Yurii Knysh.</i> Expert assessment of educational content in IT specialists training process
16.00 – 16.20	<i>Oksana Markova, Ivan Muzyka, Dennis Kuznetsov, Yurii Kumchenko, Anton Senko.</i> Enhancing IoT and cyber-physical systems in industry 4.0 through on-premise large language models: real-time data processing, predictive maintenance, and autonomous decision-making
16.20 – 16.40	Coffee Break
16.40 – 17.00	<i>Tetiana Hovorushchenko, Houda El Bouhissi, Yelyzaveta Hnatchuk.</i> Evaluation of the quality and usefulness of information technologies for supporting medical decision-making based on civil law
17.00 – 17.20	<i>Svitlana Onyshchenko, Olena Haitan, Alina Yanko, Yurii Zdorenko, Oleksandr Rudenko.</i> Method for detection of the modified DDoS cyber attacks on a web resource of an Information and Telecommunication Network based on the use of intelligent systems
17.20 – 17.40	<i>Victoria Vysotska.</i> Computer linguistic system architecture for Ukrainian language content processing based on machine learning
17.40 – 18.00	<i>Oleh Veres, Pavlo Ilchuk, Olha Kots.</i> Information system for real estate trading operations based on the data analysis

June 1 2024
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10.00 – 14.20
Main Workshop Section
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10.00 – 10.20	<i>Roman Peleshchak, Andrii Khudyi, Ihor Matviy, Roman Miroshnyk, Iryna Bahlai, Lina Halaz.</i> Modern trends of communications in higher education: problems and prospects
10.20 – 10.40	<i>Marianna Dilai, Iryna Dilai.</i> Literary text mining using verb feature clustering
10.40 – 11.00	<i>Volodymyr Riznyk.</i> Vector data systems machine learning with combinatory optimization
11.00 – 11.20	<i>Zoriana Rybchak, Olha Kulyna.</i> Synonymous variation of “war” in the British National Corpus using sketch engine: a linguistic analysis
11.20 – 11.40	<i>Tetiana Kovaliuk, Iryna Yurchuk, Olga Gurnik.</i> Topological structure of Ukrainian tongue twisters based on speech sound analysis
11.40 – 12.00	<i>Yurii Matseliukh, Myroslava Bublyk, Andriy Bosak, Marta Naychuk-Khrushch.</i> The role of public transport network optimization in reducing carbon emissions
12.00 – 12.20	Coffee Break
12.20 – 12.40	<i>Olha Chala, Tetiana Bilova, Viktoriia Dyomina, Iryna Pobizhenko, Tetiana Domina.</i> Ontologically supported case-based reasoning for decision making in humanitarian response processes

12.40 – 13.00	<i>Dmytro Dosyn, Oleh Karyy, Ihor Novakivskyi, Maryana Gvozd, Yaroslav Kis, Nataliia Kara.</i> Application of the analytical hierarchy process to evaluate hype AI technologies
13.00 – 13.20	<i>Oleksandr Tymchenko, Orest Khamula, Bohdana Havrysh.</i> Semantic analysis methods usage for the implementation of systems of graphic objects content analysis
13.20 – 13.40	<i>Zoriana Rybchak, Olha Kulyna, Leslav Kobylukh.</i> An intelligent system for speech analysis and control using customized criteria
13.40 – 14.00	<i>Victoria Vysotska, Lyubomyr Chyrun, Sofia Chyrun, Iliia Holets,</i> Information technology for identifying disinformation sources and inauthentic chat users' behaviours based on machine learning
14.00 – 14.20	<i>Taras Basyuk, Andrii Vasyliuk.</i> Peculiarities of matching the text and sound components in the Ukrainian language system development
14.20 – 14.40	<i>Victoria Vysotska, Lyubomyr Chyrun, Sofia Chyrun, Mariia Soltys,</i> Information technology for textual content author's gender and age determination based on machine learning
14.40 – 15.00	<i>Taras Basyuk, Andrii Vasyliuk.</i> Peculiarities of a symbol classification and recognition of expression structures system development
15.00 – 15.20	Coffee Break
15.20 – 16.00	Workshop Closing