

**The 7th International Conference on Computer Science,
Engineering and Education Applications (ICCSEEA2024) - Online**

April 27–28, 2024

Kyiv, Ukraine

ICCSEEA2024 Conference Program

ICCSEEA2024

Conference Sponsors

International Center of Informatics and Computer Science (ICICS), Ukraine

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine

National Aviation University, Ukraine

Lviv Polytechnic National University, Ukraine

Kharkiv National University of Radio Electronics, Kharkiv, Ukraine

Wuhan University of Technology, China

Polish Operational and Systems Society, Poland










International Research Association of Modern Education and Computer Science, Hong Kong

ICCSEEA2024 Conference Schedule - Online

Saturday, 27 April 2024

Kyiv time at 9:00 AM

Time Zone

 Kyiv, Ukraine * EEST (UTC +3)	Sat, 27 Apr 2024	09:00
 Beijing, China CST (UTC +8) 5 hour(s) ahead	Sat, 27 Apr 2024	14:00
 Warsaw, Poland * CEST (UTC +2) 1 hour(s) behind	Sat, 27 Apr 2024	08:00
 Tokyo, Japan JST (UTC +9) 6 hour(s) ahead	Sat, 27 Apr 2024	15:00
 Bucharest, Romania * EEST (UTC +3) same as Kyiv	Sat, 27 Apr 2024	09:00
 Sofia, Bulgaria * EEST (UTC +3) same as Kyiv	Sat, 27 Apr 2024	09:00
 Singapore, Singapore SGT (UTC +8) 5 hour(s) ahead	Sat, 27 Apr 2024	14:00
 Berlin, Germany * CEST (UTC +2) 1 hour(s) behind	Sat, 27 Apr 2024	08:00
 Amsterdam, Netherlands * CEST (UTC +2) 1 hour(s) behind	Sat, 27 Apr 2024	08:00

<https://www.timeanddate.com/worldclock/meeting.html>

Saturday, 27 April 2024

Kyiv time at 9:00 AM

Join a Zoom meeting.

<https://us02web.zoom.us/j/86409793116?pwd=aHRzQVFmY3gvT0MxOHFSTHR4Smo2UT09>

Meeting number: 864 0979 3116

Password: 997285

Time	ID	Invited Speeches	Area	Speakers
9:00-9:20		Open Ceremony		A.V. Petrashenk Felix Yanovsky Z.B. Hu Vadym Mukhin
9:20-9:45	0171	Automated Network for Monitoring Weather Conditions and Detecting Dangerous Atmospheric Phenomena using Small-power Radars	1	Felix Yanovsky
9:45-10:10	0130	Enhancing Network Resilience: Comparative Analysis of Flow-based Models for Fast ReRouting in Softwarized Networks	1	Oleksandra Yeremenko
10:10-10:35	0019	Simulation of Fugitive Interception Strategies for a Mobile Object on a Surface in a Vector Field of Moving Fluid	1	Liubov Oleshchenko
10:35-11:00	0013	Evaluation of Machine Learning Models for Static Analysis of Smart Contract Vulnerabilities	1	Volodymyr Sokolov
11:00-11:25	0133	A Two-Level Model of a Discrete Manufacturing System. Management Methods and Software Architecture	2	Alexander Pavlov
11:25-11:50	2626	Exploring the Mediating Role of Learning Behavior and Parental Participation in Minors Based on PLS-SEM Model	3	Jing Zuo

Chairs

Prof. Vadym Mukhin, Prof. Q.Y. Zhang, Prof. Z.B. Hu

Time	ID	Paper title	Area	Authors
11:50-13:00	0080	Application of a Genetic Algorithm to Solve a Nonlinear Problem of Optimizing the Diagnosis of Unstable Angina	1	Dmytro Uhryn, Yuriy Ushenko, Oleksii Iliuk, Vasyl Lytvyn, Victoria Vysotska, Kozhokar Maryna
	2573	Fingerprint Localization Technology of WiFi Signal for Intelligent Parking Space Navigation	1	Xiaohua Mo, Xuanhan Huang
	2664	Design of an All-Terrain Unmanned Tracking Model Vehicle	1	Ran Qing, Wugang Li, Lanxiang Wei, Guanda An, Fengmei Chen
	2529	Experimental study of green jadeite image acquisition based on HSL chromaticity parameters	1	Lili Zhang, Xinqiang Yuan

	2551	The Water Transport Configuration of Nanning City under the Background of the Western Land Sea New Corridor Pinglu Canal	2	Lanfang Zhang, Ning Yu, Jie Shang
	2566	Prediction Model for Throughput and Induced Traffic Volume of Newly Built Inland River Ports	2	Hongyu Wu, Lulu Li, Xunran Yu
	2674	The Application and Research of Human-Robot Collaborative in Chinese Language Teaching for International Students	3	Yimeng Mao,Haifeng Yang,Wenjie Fan
13:00-14:00	Break Time			
14:00-16:00	2543	Construction and Practice of Logistics Engineering Education and Teaching Ecosystem Based on "Integration of Industry Chain Driven by Digital Intelligence"	3	Yanfang Pan
	2585	Exploration of the Integration Model of Professional Course Teaching under the Background of Emerging Engineering Education-Taking Mechanical Engineering Testing Technology as an Example	3	Dan Meng
	2590	The Impact of Art Competitions on the Enhancement of Social Skills among Art Students in Science and Engineering University	3	Fang Li, Peipei Wang, Xingyu Zhang
	2629	Teaching Effect Evaluation of Management System Engineering Based on Analytic Hierarchy Process and Fuzzy Comprehensive Evaluation Method	3	Lei Zhang, Han Gui
	2645	Research on Cultivating Smart Logistics Talents in the Digital Economy Era Based on Analytic Hierarchy Process	3	Mei E Xie, Hui Ye, Lichen Qiao
	2648	Construction and Implementation of a Hierarchical Practical Teaching Model Integrating AI Technology	3	Ying Zhang,Haoliang Zhu
	2654	Implementation and Application of Economic Law Course Evaluation and Assessment Utilizing OBE Principles	3	Ting Song
	0033	A Method of Increasing the Performance in Multiprocessor Computing Systems	1	Serhii Zybin
	0016	Methods of Presenting the Structure and Content of the Silent Book of the Discipline to Students in a Game Form	3	Oleksii Beskrovnyi, Lesia Kozubtsova, Igor Kozubtsov, Valerii Lishchyna, Lyudmila Tarshilova
	0162	Time Series Anomaly Detection Algorithm Incorporating Data Augmentation in Data Scarcity Scenarios	1	Qi Huang
	0159	Aspect-based Sentiment Classification using Enhanced CNN-BiLSTM Networks and Attention	1	Ousmane Sangary, Umar Muhammad Mustapha kumshe
16:00-19:00	0011	Accuracy Improvement of Spoken Language Identification System for Close-related Languages	1	Oleh Romanovskyi, Ievgen Iosifov, Olena Iosifova, Volodymyr Sokolov, Pavlo Skladannyi, Igor Sukaylo, Oleksii Tsarenok

0021	Software Method for Distributed Asynchronous Big Data Processing of Fundraising	1	Liubov Oleshchenko, Vadym Lavrinenko
0023	Decision Framework for Optical Color Computing Architecture	1	Victor Timchenko, Vladik Kreinovich, Yury Kondratenko
0029	Reducing the Financial Burden of Typhoid Fever Treatment Through Intelligent Modeling	1	Tosin C. Olayinka, Duke Oghorodi, Akinola S. Olayinka, Ojei H. Onyijen, Edwin Onatuyeh, Kingsley Igulu, Chukwuemeka Nwankwo, Francis Uwadia, Wilson Nwankwo
0052	Enhancement of the formal method of determining processor states of a multiprocessor system under testing	1	Vitaliy A. Romankevich, Kostiantyn V. Morozov, Oleksii V. Shuryha, Alexei M. Romankevich, Lefteris Zacharioudakis
0056	A comparative study of machine learning algorithms and the prompting approach using GPT-3.5 turbo for questions categorization	1	Oleksandr Mitsa, Yurii Voloshchuk, Oleksandr Levchuk, Vasyl Petsko
0057	Evaluating Binary Classification: A Comparative Study of MCC, Cohen's Kappa, and Balanced Accuracy	1	Olga Solovei, Tetyana Honcharenko
0059	Machine Learning-Based Method for Respiratory Disease Detection from Lung Recordings	1	Lesia Mochurad, Yulianna Mochurad, Hakan Kutucu
0079	A Web-Based Platform for Visualizing Real-Time Air Quality and Weather Monitoring Data: Analysis and Perspectives	1	Nataliya Bernatska, Elvira Dzhumelia, Orest Kochan, Ivan Salamon, Iryna Typilo
0082	Modeling and Information Technology for Stock Market Forecasting with LSTM Neural Networks	1	Arsirii Olena, Oleksii Iliuk, Victoria Vysotska, Miroslav Kovalchuk, Artem Karachevtsev
0115	Computer Subsystem for Modeling Parameters of Gravure Printing Forms	1	Lyudmyla Mayik, Volodymyr Mayik, Nataliia Lotoshynska, Myroslava Dubnevych, Edmundas Kibirkštis
0064	Mortality Risk Prediction for Multiple Trauma Patients Admitted to the Hospital via Machine Learning	1	Ivan Izonin, Myroslav Stupnytskyi, Roman Tkachenko, Myroslav Havryliuk, Oleksii Biletskyi, Grygoriy Melnyk

Sunday, 28 April 2024

Kyiv time at 9:00 AM

Join a Zoom meeting.

<https://us02web.zoom.us/j/85277188053?pwd=SjVkcFJ4d0JYWGljS0R0cW5waVRBdz09>

Meeting number: 852 7718 8053

Password: 648730

Chairs

Prof. A.V. Petrashenko, Prof. Kochan Orest, Prof. Vadym Mukhin

Time	ID	Paper title	Area	Authors
9:00-13:00	0060	Enhancing Automatic Brain Tumor Detection in MRI Images through Parallelization with MPI and CUDA Technologies	1	Lesia Mochurad, Yulianna Mochurad, Shishir Kumar Shandilya
	0014	Research on the Effect of Perceived Controlled by the Algorithm on the Anti-algorithmic Behavior of Platform Workers under the Algorithmic Management	1	Lu Chen, Yi Zhang
	0062	A Comparative Assessment of the Cutting-edge Time Series Forecasting Models using Seasonal Data	1	Kyrylo Yemets, Ivan Izonin, Nataliia Lotoshynska
	0129	Advancing Urban Logistics: Grey Prediction Model's Insight into Wuhan's Highway Demand	1	Xinrui Du, Xudong Deng, Yong Wang, Cornel Mihai Nicolescu
	0137	Revolutionizing Materials Chemistry Education: An Outcome-based Approach to Course Reform	3	Yuan Zhang, Hu Yang
	0040	Data Analysis Technologies for Enhanced Educational Processes: a Case Study Using the Moodle LMS	3	Olena Hlazunova, Nataliia Klymenko, Maksym Mokriiev, Maryna Nehrey, Yevhenii Klymenko
	0066	Development of an Operator's Mathematical Model in a Man-Machine Control System of Quarry Excavators	1	Valerii Tytiuk, Denis Mrachkovskiy, Oleksii Chorny, Victor Busher, Mykola Tryputen, Viktor Kovalenko
	0069	Stock Market Values Prediction Using Deep Neural Networks	1	Ivanna Dronyuk, Myroslava Klapchuk, Deep Shankar Pratap Singh
	0071	Pairwise Comparison Methods Based on Alternatives Disaggregation for Polyaspect Decision-Making Problems	1	Oleksandr Nesterenko, Ivan Kazachkov, Yuriy Selin
	0073	An RNN-Based Stock Price Forecasting Model Enhanced by Sentiment Analysis of the Daily Financial News	1	Volodymyr Shymanskyi, Viktor Sabov
0083	Optimizing Text Data Storage for Improved Natural Language Processing: A Comprehensive Analysis	1	Artem Kalancha, Dmytro Uhryn, Zhengbing Hu	

	0087	3D Model Quality Assessment Algorithm for Additive Manufacturing	1	Viktor Marchuk, Yurii Tulashvili, Iurii Lukianchuk, Serhii Bazyl, Vasyl Kovalchuk, Oleksandr Derevyanchuk, Roman Horbatiuk
13:00-14:00	Break Time			
14:00-19:00	0117	Advancing Automotive Technical Text Analysis: A Tree-Based Classification Approach for Ukrainian Texts	1	Sergii V. Mashtalir, Oleksandr V. Nikolenko
	0124	Enhancing Fake News Detection using Ensemble Machine Learning Techniques	1	Liubov Oleshchenko, Oleksii Melnychuk
	0132	Optimizing Industrial Design with Associative Rule-Based Recommendation Systems	1	Solomiya Liaskovska, Yevgen Martyn
	0135	Procedural Recursive Algorithm of Generation Based on Triangles	1	Andrii Kudriavtsev, Oleksandra Bulgakova
	0113	Selection Requirement Document Structure in IT Projects with Association Rule Mining	1	Denys Gobov, Nikolay Sokolovskiy
	0138	Investing in People, Investing in Growth: The Regional Model for Human Capital and Economic Development	1	Larysa Zomchak, Maryna Nehrey, Yuliia Perevertailo
	0146	Analysis of the Relationship between CSR Elements Applying Isomorphic Distances	1	Ihor Oleksiv, Halyna Lema, Liubomyr Vankovych, Serhii Chapran
	0147	Influence of External and Internal Factors on Company Activity in War Conditions Applying Expert Integral Evaluation System: a Case Study from Ukraine	1	Halyna Lema, Taras Lisovych, Ihor Oleksiv, Viktoriya Kharchuk, Roman Shulyar, Oleh Lema
	0149	Extended Fast ReRouting Model under Multipath and Bandwidth Protection in Resilient Networks	1	Oleksandr Lemeshko, Oleksandra Yeremenko, Maryna Yevdokymenko, Batoul Sleiman, Valentyn Lemeshko, Mykhailo Persikov
	0075	Enhancing Binary Image Processing Speed Using Correlation-Based Sign Function Analysis	1	Andriy Segin, Nataliia Vozna, Ivan Albanskiy, Bogdan Maslyiak, Yuriy Popyk, Joanna Michalowska
0036	Determination of the Rational Parameters of Piezoelectric Actuators for Efficient Meat Shredding	2	Olexandr Batrachenko, Constantine Bazilo, Sergey Filimonov, Nadiia Filimonova, Volodymyr Shadkhin	
0121	Innovative Process for Granulation of Heterogeneous Liquid Systems in a Fluidized Bed	2	Bogdan Korniyenko, Yaroslav Kornienko, Serhii Haidai, Andrii Liubeka	

	0077	Studying Characteristics of the Modified Two-level Digital Frequency Synthesizer	2	Roman Stakhiv, Joanna Michalowska
	0155	Improving the Energy Efficiency of Industrial Enterprise's Power Supply System by Relocating Movable Local MicroGrid Based on Mobile Power Plant	2	Natalia Savchenko, Oksana Dovgalyuk, Andrii Tretiak
	0142	Developing Emotional Intelligence of Future Teachers	3	Iryna Pinchuk
	0017	SMART-Lecture Methodology as Modernization of Blended Training at Higher Education Establishment in Conditions of Forced Unpredictability	3	Stanislav Zabara, Lesia Kozubtsova, Oleksii Beskrovnyi, Igor Kozubtsov, Olena Mamonova
	0090	Implementation of STEM Project "Polyhedra Spatial Modeling" in Professional Training of Future Engineers and Educators	3	Oleksandr Derevyanchuk, Vasyl Kovalchuk, Serhiy Balovsyak, Mickolay Dominikov, Hanna Kravchenko, Oleksii Pshenychnyi, Andrii Kovalchuk
	0123	Advantages and Disadvantages of Distance Education and Blended Learning as a Compromise Form of Higher Education: A Survey-Based Analysis	3	Anna Serednytska, Chen Hong

Instructions for Presentations

Materials provided by the presenter

PowerPoint or PDF files

Durations of each presentation (tentatively)

Regular oral session: about 10–15 minutes of presentation, 5 minutes of Q&A

Invited Speech: 10–20 minutes of presentation, 10 minutes of Q&A

The conference has three study areas:

Area 1: Computer Science and Software Engineering

Area 2: Engineering and Systematical Technologies

Area 3: Education Reform and Innovation

One author of each paper should make a presentation and Q&A process online; otherwise, the paper will be removed from the conference book.

If you have any questions about the conference program, please don't hesitate to contact us by email at iccsea@icics.net.