

CONFERENCE PROGRAM



OCTOBER 16-17

OCTOBER 16

9:00-10:00

Registration (907)

10:00-12:30

Opening Plenary Session (907)

12:30-14:00

Coffee Break (Innovation Center)

14:00-17:00

Section Sessions (404, 405)

17:00-19:00

Welcome Dinner (Innovation Center)

KEYNOTE SPEAKERS

FULVIO MASTROGIOVANNI

University of Genoa, Genoa, Italy

KAMILA LUKPANOVA

Almaty Tourism Bureau,
Almaty, Kazakhstan

VIKTORIIA KHRUTBA

National Transport University,
Kyiv, Ukraine

MARAT NURTAS

International Information
Technology University,
Almaty, Kazakhstan

OCTOBER 17

9:00-10:00

Registration (907)

10:00-11:30

Plenary Session (907)

11:30-12:30

Coffee Break (Innovation Center)

14:00-17:00

Section Sessions (404, 405)

KEYNOTE SPEAKERS

BOHDAN HAIDABRUS

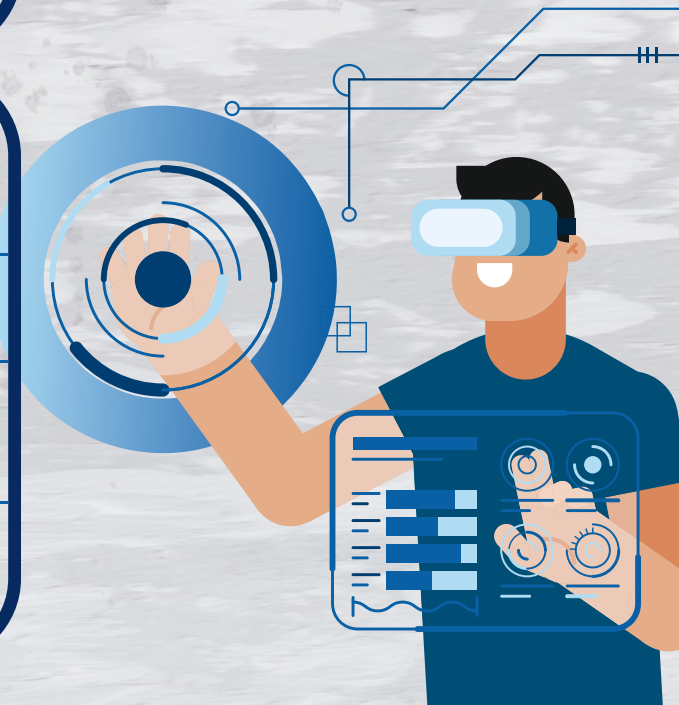
Riga Technical University,
Riga, Latvia

BATYRKHAN OMAROV

International Information
Technology University,
Almaty, Kazakhstan

ZAKARIA MAAMAR

University of Doha for Science
and Technology, Doha, Qatar



Wednesday, October 16, Plenary Session

Chairman: Madina Ipalakova

10.00 – 12.00, Room 907

Zoom conference link:

<https://zoom.us/j/92004510732?pwd=ExsvI7yOWWqQn8b0zW5urWbBJlhkKx.1>

Conference ID: 920 0451 0732

Access code: 247959

Welcoming speech: Assylbek Issakhov, Chairman of the Board – Rector of the International Information Technology University

Welcoming speech: Kateryna Kolesnikova, Vice-Rector for Science and Research, International Information Technology University

Keynote Speaker: Fulvio Mastrogiovanni, University of Genoa, Genoa, Italy

Human-Robot Collaboration as a New Playground for Artificial Intelligence

Keynote Speaker: Kamila Lukpanova, Almaty Tourism Bureau, Almaty, Kazakhstan

Влияние digital-технологий на индустрию туризма

Keynote Speaker: Viktoriia Khrutba, National Transport University, Kyiv, Ukraine

Formation of a Digitalization Culture in Higher Education Institutions of Ukraine. Analysis of the current state

Keynote Speaker: Marat Nurtas, International Information Technology University, Almaty, Kazakhstan

Artificial Intelligence for Natural Disaster Prediction: Enhancing Early Warning Systems

Wednesday, October 16, Section 3 «Data Science and Artificial Intelligence»

Chairman: Marat Nurtas, Secretary: Zeinel Momyunkulov

14.00 – 17.00, Room 405

Zoom conference link

<https://us06web.zoom.us/j/87043325544?pwd=hpSwCnMUU2aXltqbx3PagPNbTAQcLS.1>

Conference ID: 870 4332 5544

Access code: 027164

4	Mohamed Hamada, Emmanuel Abiche and Gehad Hamada	Using the Machine Learning Models to Optimize Time Management in Logistics and Supply Chain Management Systems	International Information Technology University
8	Victor Doma, Erna Berbić, Ali Abd Almisreb, Mohammed A. Saleh and Saule Amanzholova	A Review of AI Transformers in Image Segmentation	International University of Sarajevo International Information Technology University
9	Artem Bykov, Umut Turusbekova, Nurkamilya Daurenbayeva, Almas Nurlanuly and Madina Ipalakova	Modelling and Forecasting of Soil Deformations in Karst-Hazardous Areas	International Information Technology University L.N. Gumilyov Eurasian National University Academy of Civil Aviation
19	Aigerim Aitim, Muslima Abdulla and Aigerim Altayeva	Human-Centric AI: Improving User Experience with Natural Language Interfaces	International Information Technology University
18	Aigul Niyazgulova, Nurzhan Duzbayev and Saule Ashenova	The Impact of Digital Technologies and Big Data on the Creation of a Digital Audience and the Development of Data Journalism	International Information Technology University
20	Aigerim Aitim, Muslima Abdulla and Aigerim Altayeva	Sentiment Analysis using Natural Language Processing	International Information Technology University
22	Daniyar Sultan, Rustam Abdrakhmanov, Aigerim Altayeva, Abdimukhan Tolep and Aigerim Toktarova	Hybrid Deep Learning Model for Cyberbullying Detection on Online Social Media Data	International University of Tourism and Hospitality Narxoz University International Information Technology University Khoja Akhmet Yassawi International Kazakh-Turkish University

23	Aigerim Altayeva, Aigerim Toktarova, Rustam Abdrakhmanov and Abdimukhan Tolep	Applying Machine Learning for Real-Time Hate Speech Detection in Social Media	International University of Tourism and Hospitality International Information Technology University Khoja Akhmet Yassawi International Kazakh-Turkish University
30	Serhii Dolhpolov, Tetyana Honcharenko, Igor Achkasov and Vladyslav Hots	Optimizing Construction Site Management through YOLOv5-Based Object Detection: A Comprehensive Analysis of Resource Utilization and Safety Enhancement	Kyiv National University of Construction and Architecture
29	Serhii Dolhpolov, Tetyana Honcharenko, Denys Chernyshev, Olena Panina and Antonina Makhynia	Advancing Automated Quality Control in Automotive Manufacturing: A Comparative Analysis of YOLOv8, YOLOv9, and YOLOv10 for Vehicle Damage Detection	Kyiv National University of Construction and Architecture

Wednesday, October 16, Section 4 «Cybersecurity, Infocommunication Systems and Networks»

Chairman: Galym Alin, Secretary: Nessibeli Askarbekova

14.00 – 17.00, Room 404

Zoom conference link

<https://us06web.zoom.us/j/84076224081?pwd=iU0pL9RxsB7WFPqCYtwe0JqGzzZRbU.1>

Conference ID: 840 7622 4081

Access code: 515679

1	Makhabbat Bakyt, Luigi La Spada, Sabyrzhan Atanov, Khuralay Moldamurat and Mansur Moldakhanov	An Improved Approach: Adaptive Learning for High-Speed Data Encryption of Low-Earth Orbit (LEO) Satellites	L.N. Gumilyov Eurasian National University Edinburgh Napier University
6	Kateryna Mokliakova, Kateryna Kolesnikova, Tetiana Babenko, Rostyslav Lisnevskiy and Aisha Abylgazy	Cybersecurity-Level Assessment Models	International Information Technology University Taras Shevchenko National University of Kyiv
11	Mohammed A. Saleh, Saule Amanzholova, Zhibek Zhetekbay, Meruyert Dauletbek and Ali Abd Almisreb	Blockchain Interoperability: Challenges and Solutions for a Connected Future	International Information Technology University
13	Qais Saif Qassim, Nessibeli Askarbekova, Saule Amanzholova and Meruyert Dauletbek	Enhancing ML Model Efficiency for DDoS Attack Detection on Web Servers in Resource-Constrained Environments	International Information Technology University
15	Zhanerke Temirbekova, Zuhra Abdiakhmetova, Sakhybay Tynymbayev and Zhansaya Bekaulova	Efficient Evaluation of Cryptographic Solutions in IoT Systems	Al-Farabi Kazakh National University
27	Aigerim Toktarova, Aigerim Altayeva, Rustam Abdrakhmanov, Danyar Sultan and Baktykul Jakhanova	Hate Speech Detection on Social Media Using Machine Learning	M. Auezov South Kazakhstan University Khoja Akhmet Yassawi International Kazakh-Turkish University International Information Technology University International University of Tourism and Hospitality Asfendiyarov Kazakh National Medical University

28	Tetiana Babenko, Hryhorii Hnatiienko, Larysa Myrutenko, Andrii Bigdan and Viktoriia Hrechko	Assessing the Level of Security of Enterprise Information Systems	Taras Shevchenko National University of Kyiv International Information Technology University Blekinge Tekniska Högskola
34	Alimzhan Baikenov, Emil Faure, Sahybai Tynymbayev, Olga Abramkina and Artem Skutskyi	Research of the Effectiveness of Erame Eynchronization Methods for Creating Markerless Telecommunication Systems for Exchanging Short Packets	G. Daukeev Almaty University of Power Engineering and Telecommunications Cherkasy State Technological University International Information Technology University
36	Yevgeniya Daineko, Dmitry Gubsky, Aigul Kulakayeva, Altay Aitmagambetov and Bagdat Kozhakhmetova	Virtual Laboratory Work to the Study of Modulation Types of Radio Signals	International Information Technology University
41	Musab A. M. Ali, Nessibeli Askarbekova, Damelya Eskendirova and Zhadyra Ongenbayeva	A Review: Strategies and Challenges for Preventing AI Cyber Attacks	University of Technology and Applied Sciences International Information Technology University

Thursday, October 17, Plenary Session

Chairman: Madina Ipalakova

10.00 – 11.30, Room 907

Zoom conference link

<https://zoom.us/j/99121727303?pwd=PH3KUzYxM7fbSNhfB1cTbciXHuXs6m.1>

Conference ID: 991 2172 7303

Access code: 176662

Keynote Speaker: Bohdan Haidabrus, Riga Technical University, Riga, Latvia

*Planning Increment Execution in Data Programme:
Challenges and Lesson Learns*

Keynote Speaker: Batyrkhan Omarov, International Information Technology University,
Almaty, Kazakhstan

*Deep Learning and Its Applications in Biomedical
Engineering*

Keynote Speaker: Zakaria Maamar, University of Doha for Science and Technology,
Doha, Qatar

Data-as-an-Asset: Challenges, Principles, and Solutions

Wednesday, October 17, Section 1 «Software and Knowledge Engineering», Section 2 «Smart Technologies and IoT»

Chairman: Serik Joldasbayev, Azimbek Omar **Secretary:** Aknur Yemberdiyeva, Aliya Kulbayeva

14.00 – 17.00, Room 404

Zoom conference link

<https://us06web.zoom.us/j/89880514968?pwd=dAcjZ6hOWjnasNfvloWobb4BSfA02n.1>

Conference ID: 898 8051 4968

Access code: 138782

5	Jan-Peter Mund, Evelyn Wallor, Viktoriia Khrutba, Angelina Chugai, Iryna Patseva and Yuliia Zakharova	Formation of a Digitalization Culture in Higher Education Institutions of Ukraine. Analysis of the Current State	Eberswalde University for Sustainable Development National Transport University Odesa I.I. Mechnikov National University Zhytomyr Polytechnic State University
17	Bakhyt Alipova	Distribution of Coupled Thermoelastic Waves in the Different Rocks using MatLab GUI Application	International Information Technology University
45	Kateryna Kolesnikova, Alexandra Klimanova and Vadim Ziuziun	The Law of Demeter in IT Project Development Based on Design Pattern	International Information Technology University Taras Shevchenko National University of Kyiv
48	Aigul Medeshova, Nurkhat Zhakiyev, Saule Akimova, Dinara Kurmasheva, Gulmira Amanturlina and Murat Ozer	The Experience of Creating an Open Educational Space and its Usage in Distance Learning	M. Utemisov West Kazakhstan University Astana IT University Gymnasium No. 42 "Ak niet" University of Cincinnati
51	Kamila Abdugapparova, Madina Ipalakova and Artem Bykov	Comprehensive Review of Digital Museums: Innovations, Technologies, and User Experiences	International Information Technology University
2	Kateryna Kolesnikova, Rostyslav Lisnevskiy, Viktoriia Oderiieva, Myroslava Gladka and Olga Kravchenko	Development of a System for Monitoring Health and Patient Care Based on IoT Technologies	International Information Technology University Taras Shevchenko National University of Kyiv

3	Diana Smagul and Yevgeniya Daineko	Robotic Process Automation: A Comprehensive Systematic Literature Review Across Industries, with a Focus on Healthcare	International Information Technology University
7	Rostyslav Lisnevskiy, Svitlana Biloshchytska, Diana Kushkimbayeva, Pavlo Kryschniy and Vladlen Lisnevskiy	Development of a Blockchain Platform for Logistics Order Management Using IoT Technologies	International Information Technology University Astana IT University Taras Shevchenko National University of Kyiv National Defense University of Ukraine Kyiv National University of Construction and Architecture
10	Aditya Pal, Hari Mohan Rai, Abdul Razaque, Saule Amanzholova and Tamiris Abildayeva	Denoising of ECG Signals using Artificial Neural Network based Gradient Descent Method	Gachon University International Information Technology University
16	Aissulu K. Kaldarova, Marco A. Vasquez, Nazym B. Baisbay, Saule T. Amanzholova and Gulshat B. Baispay	Enhancing Students' Speaking Skills Through Mind Mapping Tools	International Information Technology University
38	Binara Imankulova, Alтынay Zhakipova and Abdul Razaque	IoT-Based Real-Time Indoor Air Quality Monitoring and Web Server Management System Using Raspberry Pi	Suleyman Demirel University International Information Technology University
49	Andrii Biloshchytskyi, Olexander Kuchanskiy, Alexander Neftissov, Svitlana Biloshchytska and Sapar Toxanov	Theoretical Foundations of Environmental Pollution Monitoring	Astana IT University Kyiv National University of Construction and Architecture
50	Zhansaya Bekaulova, Nurzhan Duzbayev, Gulnar Mamatova, Makhamedi Bersugir and Nurbek Bekaulov	Adaptive Learning Model in the Field of Gamification	International Information Technology University Abai Kazakh National Pedagogical University
53	Nurzhan T. Duzbayev, Zhandaulet A. Musilimov, Lyudmila A. Kozina and Manat K. Tuyenbayev	Improvement of the Electronic Circuit and Printed Circuit Board for the Breathing Simulator	International Information Technology University
54	Akkyz Mustafina, Gulzhan Nuruldayeva and Yedil Yesenkulov	Digital Twins in Ensuring Human Life Safety	International Information Technology University Satpayev University

Thursday, October 17, Section 3 «Data Science and Artificial Intelligence»

Chairman: Marat Nurtas, Secretary: Zeinel Momynkulov

14.00 – 17.00, Room 405

Zoom conference link

<https://us06web.zoom.us/j/82475977550?pwd=UBrvhsl4oBaDMXPLAVBwfln2u5Xon9.1>

Conference ID: 824 7597 7550

Access code: 828330

25	Zhanseri Ikram, Bauyrzhan Omarov and Batyrkhan Omarov	Hierarchical Transformer Based Learning for Robust Face Anti-Spoofing	Al-Farabi Kazakh National University International Information Technology University
31	Oleksii Matsiiievskiy, Igor Achkasov, Vladyslav Hots and Yevhenii Borodavka	Adaptive Strategies for Autonomous Robotic Systems Using Reinforcement Learning Methods	Kyiv National University of Construction and Architecture
32	Zhanseri Ikram and Bauyrzhan Omarov	Fusion of Vision Transformers and Convolutional Networks for Advanced Face Anti-Spoofing	Al-Farabi Kazakh National University
37	Maira Kopzhasarova and Dinara Kozhamzharova	Explainable AI (XAI): Techniques, Applications, and Challenges	International Information Technology University
39	Saya Sapakova, Bekzat Kambarova, Askar Sapakov, Tolganay Chinibayeva and Aknur Yemberdiyeva	Analyzing Russian Borrowings in Kazakh Social Media Using Machine Learning	International Information Technology University Kazakh National Agrarian Research University Kazakh National Women's Teacher Training University
40	Sergiy Bushuyev, Natalia Bushuyeva, Svetlana Murzabekova, Maira Khussainova and Rakhmatullo Saidullayev	Transformation of the Education Landscape in an AI Environment	Kyiv National University of Construction and Architecture NNEF Public Foundation

42	Ruslan Krasnozhonov, Aizhan Altaibek, Aizhan Ydydrys and Marat Nurtas	Time Series Forecast of Inbound Call Volume in Call Center Using Machine Learning Methods	International Information Technology University Institute of Ionosphere
44	Serhii Chernov, Liudmyla Chernova, Liubava Chernova, Serhii Titov and Kateryna Kolesnikova	The General Algorithm of Linearization in Linear Fractional Optimization Problems	Admiral Makarov National University of Shipbuilding International Information Technology University
47	Bekzat Bukhatov, Aizhan Altaibek and Marat Nurtas	Modern Methods of Visualization and Preprocessing of Seismic Data for Deep Learning: A Review of Python-Based Approaches	International Information Technology University Institute of Ionosphere
52	Lyazat Naizabayeva, Kateryna Kolesnikova and Gulzat Turken	Integrating Statistical Analysis into Everyday Business Operations Using Mobile Technologies	International Information Technology University Al-Farabi Kazakh National University