

CONFERENCE PROGRAM



DECEMBER 06-07

December 06

- 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, 804)
- 17:00-19:00 Welcome Dinner (Innovation Center)

Keynote Speakers

Oscar Pastor, Universidad Politécnica de Valencia, Spain

Madina Mansurova, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Bohdan Haidabrus, Riga Technical University, Riga, Latvia

Seref Sagiroglu, Computer Engineering Department, Gazi University, Ankara, Turkey

December 07

- 9:00-10:00 Registration (907)
- 10:00-11:30 Plenary Session (907)
- 11:30-12:30 Coffee Break (Innovation Center)
- 12:30-17:00 Section Sessions (404, 405, 804)

Keynote Speakers

Seyda Ertekin, Middle East Technical University (METU), Ankara, Turkey

Pakizar Shamoi, Kazakh-British Technical University, Almaty, Kazakhstan

Oleksandr Kuchanskyi, Taras Shevchenko National University of Kyiv, Ukraine



Wednesday, December 6, Plenary Session

Chairman: Madina Ipalakova

10.00 – 12.00, Room 907

Zoom conference link:

<https://us06web.zoom.us/j/89904572795?pwd=YEosa8RpGNRt1WUbMdp0FixjmJHvud.1>

Conference ID: 899 0457 2795

Access code: 866834

Welcoming speech: Askar Khikmetov, Rector of the International Information Technology University	
Welcoming speech: Darkhan Akhmed-Zaki, Vice-Minister for Science and Higher Education	
Keynote Speaker: Oscar Pastor, Universidad Politécnica de Valencia, Spain	<i>Software Engineering for Life Engineering: Deciphering the Language of Life</i>
Keynote Speaker: Madina Mansurova, al-Farabi Kazakh National University, Almaty, Kazakhstan	<i>Design and Development of Student Digital Health Profile</i>
Keynote Speaker: Bohdan Haidabrus, Riga Technical University, Riga, Latvia	<i>Agile Framework as a Key to Software Development and Delivery</i>
Keynote Speaker: Seref Sagiroglu, Computer Engineering Department, Gazi University, Ankara, Turkey	<i>Big Data Analytics, Security and Privacy Issues in Smart Grid Systems</i>

Wednesday, December 6, Section 1 «Software and Knowledge Engineering»

Chairman: Suleimen Kaimov, **Secretary:** Aknur Yemberdiyeva

14.00 – 17.00, Room 404

Zoom conference link

<https://us06web.zoom.us/j/82416914010?pwd=0j9bb6f8kEl8lazBUN8nHRKiCgsMeg.1>

Conference ID: 824 1691 4010

Access code: 762383

1	Sagi Baigabulov and Madina Ipalakova	Virtual Reality Enabled Immersive Data Visualization for Data Analysis	International Information Technology University
2	Shynggys Kurmanbek, Tolganay Chinibayeva, Meer Jaro Khan and Akkyz Mustafina	Blockchain Technology in the Field of Music Industry	International Information Technology University
3	Saida Beknazarova and Dinara Kozhamzharova	Degree of Influence of Natural Phenomena on Images in Visualization Systems	Tashkent University of Information Technologies named by Muhammad Al-Khwarizmi, International Information Technology University
4	Meer Jaro Khan, Mohsin Ali Farhad, Nurgul Nalgozhina and Abdul Razaque	Enhanced Algorithm Blend and Turing for Improving Quality-of-Service of Multiple Datasets	International Information Technology University
5	Jan-Peter Mund, Evelyn Wallor, Victoria Khrutba, Marina Dekhtiar, Yuliia Khrutba, Yuliia Nikitchenko and Andrii Holovko	Creation and Use of Audio Content in the Educational Process	National Transport University, Ukrainian National Forestry University, Eberswalde University for Sustainable Development
6	Adil Maidanov, Sabyrzhan Atanov, Hüseyin Canbolat and Shadi Aljawarneh	Advanced Control Strategies for DC Motor Speed Regulation: A Comparative Study of Artificial Neural Networks and ANFIS	L.N. Gumilyov Eurasian National University, Ankara Yildirim Beyazit University

7	Madina Ipalakova, Yevgeniya Daineko, Dana Tsoy and Zhiger Bolatov	Implementation of a Virtual Museum: Mobile Application Development Concept	International Information Technology University
8	Nurtugan Azatbekuly and Bazargul Matkerim	Enhancing Python Programming Education through Dynamic Code Execution and Assessment Methods	Al-Farabi Kazakh National University
9	Mohamed A. Hamada and Adejor E. Abiche	Impact of Data Mining and Social Media Marketing to Enrich Customer Satisfaction	International Information Technology University

Wednesday, December 6, Section 3 «Data Science and Artificial Intelligence»

Chairman: Marat Nurtas, **Secretary:** Gaukhar Marat

14.00 – 17.00, Room 405

Zoom conference link

<https://us06web.zoom.us/j/83672922078?pwd=jtbV3aDj96B8cRhhGmHsNUnJJHEEI1.1>

Conference ID: 836 7292 2078

Access code: 325528

1	Saya Sapakova, Askar Sapakov, Nurgul Madinesh, Ali Almisreb and Meruyert Dauletbek	Using Machine Learning to Predict Food Prices in Kazakhstan	International Information Technology University, Al-Farabi Kazakh National University, International University of Sarajevo
2	Nikolay Kiktev and Alexey Kutyrev	Flower Detection and Counting Using CNN for Thinning Decisions in Apple Trees	Taras Shevchenko National University of Kyiv, National University of Life and Environmental Sciences of Ukraine, Federal Scientific Agroengineering Center VIM
3	Nikolay Kiktev, Alla Dudnyk, Oleksiy Opryshko, Dmytro Komarchuk and Kamil Witaszek	Using Neural Networks to Identify Technological Stress Using the Example of Crop Compaction	Taras Shevchenko National University of Kyiv, National University of Life and Environmental Sciences of Ukraine, Fichessoft LLC, Poznań University of Life Sciences
4	Danel Mashakova, Marat Nurtas, Aizhan Ydyrys and Madina Ipalakova	Improving Weather-Sensing Uncrewed Aerial Vehicles with Machine Learning Prediction Models	International Information Technology University, Institute of Ionosphere
5	Konstantin Borodkin, Marat Nurtas, Aizhan Altaibek, Yevgeniya Dainecko and Temirlan Otepov	Data Pre-Processing and Visualization for Machine Learning Models and Its Applications in Education	International Information Technology University
6	Marat Nurtas, Temirlan Otepov, Aizhan Altaibek, Kateryna Kolesnikova and Konstantin Borodkin	Machine Learning in Finalizing Grades of Students' Performance in Distance Learning	International Information Technology University

7	Gulzat Turken, Zhanerke Temirbekova, Lyazat Naizabayeva and Manuel M. Barata	Study on Data Warehousing for E-Commerce Logistics	International Information Technology University, Al-Farabi Kazakh National University, Instituto Superior de Engenharia de Lisboa
8	Aigerim Bolshibayeva, Sabina Rakhmetulayeva and Aliya Kulbayeva	Machine Learning Methods to Detect Terrorist Financing	International Information Technology University, Kazakh-British Technical University, Narxoz
9	Sergey Bushuyev, Natalia Bushuyeva, Victoria Bushuieva, Denis Bushuiev and Svitlana Onyshchenko	Value Harmonization in the Digital Age	Kyiv National University of Construction and Architecture, Odesa National Maritime University
10	Lashyn Adiat, Aizhan Altaibek, Marat Nurtas and Aigerim Altayeva	Comprehensive Study on Machine Learning Applications for Heart Disease Risk Prediction	International Information Technology University

Wednesday, December 6, Section 4 «Cybersecurity, Infocommunication Systems and Networks»

Chairman: Galym Alin, **Secretary:** Nessibeli Askarbekova

14.00 – 17.00, Room 804

Zoom conference link

<https://us02web.zoom.us/j/83183957509?pwd=N1VobWtoemhMV1RsSUVpa2hGejY1UT09>

Conference ID: 831 8395 7509

Access code: 759530

1	Mohammed Saleh, Saule Amanzholova, Azhar Sagymbekova, Aizhan Zaurbek and Ali Almisreb	How Can Blockchain Strengthen Cybersecurity? Unraveling the Promises and Challenges	International Information Technology University
2	Abdul Razaque, Saule Amanzholova, Azhar Sagymbekova and Aizhan Zaurbek	Performance Comparison of Convolutional Neural Networks for Handwritten Digit Recognition Using Various Activation Functions and Optimization Algorithm	International Information Technology University
3	Aigul Kulakayeva, Altay Aitmagambetov, Zhadyra Ongenbayeva and Bagdat Kozhakhmetova	Estimation of the Error in Determining the Location of Radio Emission Sources at Satellite Radio Monitoring	International Information Technology University, Energo University
4	Bagdat Kozhakhmetova, Aigul Kulakayeva, Anatoly Samsonenko, Zhadyra Ongenbayeva and Sungat Koishibay	Research of Radiating Elements of a Phased Antenna Array	International Information Technology University, Energo University
5	Kaustubh Kumar Shukla, Hari Mohan Rai, Abdul Razaque, Saule Amanzholova and Bagdat Kozhakhmetova	Enhancing Gain and Bandwidth of Microstrip Antennas through Optimized 3D Printing: A Study on Design and Implementation	International Information Technology University, Energo University, Dronacharya Group of Institutions
6	Hryhorii Hnatienko, Tetiana Babenko, Larysa Myrutenko, Oleksii Hnatienko and Yerulan Kurbanbek	Taking into account the Presence of Critical Elements to Ensure the Functional Stability of the Organizational System	Taras Shevchenko National University of Kyiv, International Information Technology University

7	Zhanerke Temirbekova, Gulzat Turken and Manuel M. Barata	Using Fully Homomorphic Encryption in IoT	International Information Technology University, Al-Farabi Kazakh National University, Instituto Superior de Engenharia de Lisboa
8	Liubava Chernova and Kateryna Semenchuk	Research of Supply Chain Strategies in Project Activities	Admiral Makarov National University of Shipbuilding, State University of Intellectual Technologies and Communications

Thursday, December 7, Plenary Session

Chairman: Madina Ipalakova

10.00 – 11.30, Room 907

Zoom conference link

<https://us06web.zoom.us/j/83337595817?pwd=cWnOfbEuEzMKYjpbNcyD5GclVnIAAp.1>

Conference ID: 833 3759 5817

Access code: 163120

Keynote Speaker: Seyda Ertekin, Middle East Technical University (METU), Ankara, Turkey	<i>The New Era of Artificial Intelligence: Opportunities & Challenges</i>
Keynote Speaker: Pakizar Shamoi, Kazakh-British Technical University, Almaty, Kazakhstan	<i>Towards Universal Understanding of Color Harmony and Color-Emotion Associations: Fuzzy Approach</i>
Keynote Speaker: Oleksandr Kuchanskyi, Taras Shevchenko National University of Kyiv, Ukraine	<i>The Evaluation of Scientific Productivity</i>

Thursday, December 7, Section 2 «Smart Technologies and IoT»

Chairman: Nurlan Karimzhan, **Secretary:** Venera Elle

12.30 – 16.00, Room 404

Zoom conference link

<https://us06web.zoom.us/j/89277094661?pwd=g49M2ebKhfaPap6uOyiGe6KGs1194.1>

Conference ID: 892 7709 4661

Access code: 232104

1	Zhansaya Bekaulova, Nurzhan Duzbayev, Gulnar Mamatova, Mukhamedi Bersugir and Nurbek Bekaulov	Adaptive Learning Model and Analysis of Existing Systems	International Information Technology University, Abai Kazakh National Pedagogical University, Al-Farabi Kazakh National University
2	Aissulu Kaldarova, Marco Vasquez, Nazym Baisbay and Aigerim Altayeva	The Effects of Quizlet on International Information Technology University First Year Students' Vocabulary Acquisition	International Information Technology University, Ablai Khan Kazakh University of International Relations and World Languages
3	Yevgeniya Daineko, Akkyz Mustafina, Regina Tigay, Gulbakhor Irismatova, Yuliya Miloshenko and Galym Omarov	Bridging the Digital Divide or Empowering for the Third Age	International Information Technology University
4	Saniya Kabdrgalinova, Altynay Kenzhebekova, Leila Mirzoyeva, Zhannur Manapbayeva and Yevgeniya Daineko	Motivating Students in learning English for Specific Purposes (ESP)	International Information Technology University
5	Nurzhan Duzbayev, Zhandaulet Musilimov, Lyudmila Kozina and Manat Tuyenbayev	Development of the Electronic Circuit and Printed Circuit Board for the Breathing Simulator	International Information Technology University
6	Abzal Kyzyrkanov, Sabyrzhan Atanov, Shadi Aljawarneh and Nazira Tursynova	Intelligent Control of a Swarm of Reconnaissance Robots for Terrain Monitoring Tasks	Astana IT University, L.N. Gumilyov Eurasian National University, Jordan University

7	Sabyrzhan Atanov, Hüseyin Canbolat and Zhexen Seitbattalov	Digital Model of Automated Mobile Reconnaissance Robot with Artificial Intelligence	L.N. Gumilyov Eurasian National University, Ankara Yildirim Beyazit University
8	Liubava Chernova, Iryna Zhuravel, Evgeniy Trushliakov, Anatoliy Zubarev and Inna Maister	Digital Transformation in Project Management	Admiral Makarov National University of Shipbuilding
9	Kateryna Kolesnikova, Nurgul Bakhitkyzy and Oleksii Kolesnikov	Traffic Modeling Approaches	International Information Technology University, PM Solution
10	Dmytro Lukianov, Kateryna Kolesnikova, Alen Mussurmanov and Rostyslav Lisnevskyi	Using Blockchain Technology in Scientometrics	International Information Technology University

Thursday, December 7, Section 3 «Data Science and Artificial Intelligence»

Chairman: Marat Nurtas, **Secretary:** Gaukhar Marat

12.30 – 16.00, Room 405

Zoom conference link

<https://us06web.zoom.us/j/83057625583?pwd=hwwpr3DIJNM7QeyXXMk4a4R9dYYXGJ.1>

Conference ID: 830 5762 5583

Access code: 607360

1	Aksultan Mukhanbet and Bazargul Matkerim	Parallel Implementation of Neural Networks for Solving the Problem of Oil Production	Al-Farabi Kazakh National University
2	Bakhyt Alipova, Yevgeniya Daineko, Nazerke Rysbek, Fatima Tokmukhamedova and Zhiger Bolatov	Computer Simulation of the Human Cardiovascular System in the Power BI Software Environment	International Information Technology University
3	Anel Abdugulova, Aizhan Altaibek, Dina Kulzhanova and Aigerim Altayeva	Prediction of the Incidence Rate of Lung Cancer Patients Using Machine Learning	International Information Technology University, Institute of Ionosphere
4	Mohammad Ali Sheikh Soltani, Marat Nurtas, Bazargul Matkerim, and Nurgul Nalgozhina	The Effectiveness of Deep Learning Algorithms in Sign Road Recognition Problem	International Information Technology University, Institute of Ionosphere, Al-Farabi Kazakh National University
5	Syed Atif Moqurraab, Abdul Razaque, Yersain Chinibayev and Tolganay Chinibayeva	Binary Rainfall Classification using SMOTE: An Effective Machine Learning Strategy	International Information Technology University
6	Azamat Berikuly, Marat Nurtas and Dinara Kozhamzharova	Machine Learning Algorithm for Biometric Identification of a Face and Its Application: Survey	International Information Technology University

7	Sergey Bushuyev, Andrii Ivko, Dmytro Iakymenkov, Galyna Roizina and Mykola Malaksiano	Application of the Data Pipeline Concept for Improving the Transport Corridors' Efficiency	Kyiv National University of Construction and Architecture, DUX Consulting, Odessa National Maritime University
8	Assyl Tuleubekov, Aizhan Doskozhanova and Madina Ipalakova	Natural (Human) Consciousness and Artificial Intelligence: Philosophical Analysis	Narikbayev University, International Information Technology University
9	Aigul Nyazgulova, Sabina Rakhmetulayeva and Saule Ashenova	The Impact of 3D and AR on Consumer Audiences	International Information Technology University
10	Dauren Amangeldi, Marat Nurtas, Nurzhan Duzbayev and Aizhan Altaibek	Forecasting Vegetation Dynamics in Kazakhstan's Ecosystems through Deep Learning	International Information Technology University, Institute of Ionosphere
11	Askarbek Asubaev, Aizhan Altaibek, Marat Nurtas and Aigerim Altayeva	Violence Recognition in Surveillance Videos with Dense Networks	International Information Technology University, Institute of Ionosphere

Thursday, December 7, Section 4 «Cybersecurity, Infocommunication Systems and Networks»

Chairman: Galym Alin, **Secretary:** Nessibeli Askarbekova

12.30 – 16.00, Room 804

Zoom conference link

<https://us02web.zoom.us/j/85739134884?pwd=Q29jTUEvUmZMdEpHSk5zWkRzaEpKZz09>

Conference ID: 857 3913 4884

Access code: 204292

1	Sabyrzhan Atanov, Kymbat Seilkhanova, Yerzhan Seitkulov and Shadi A. Aljawarneh	Analysis and Prospects for Ensuring the Cybersecurity of Industrial Robots	L.N. Gumilyov Eurasian National University
2	Nurzhan Duzbayev, Svetlana Velitchenko and Zhanat Doskhozhina	Immersive Media as a New Multimedia Experience: Prospects and Risks	International Information Technology University
3	Zhassulan Mendakulov, Ivan Vassilyev, Lola Berdimuratova and Altay Aitmagambetov	Increasing the Reliability of Human Respiration Pulmonograms Measured by Radio Wave Method	JSC Special Design and Technology Bureau “Granit”, International Information Technology University
4	Abdul Razaque, Hari Mohan Rai, Yersain Chinibayev and Tolganay Chinibayeva	Analysis of Major Factors Preventing Cybercrime Reduction in Kazakhstan	International Information Technology University
5	Makhabbat Bakyt, Khuralay Moldamurat, Assem Konyrkhanova, Adil Maidanov and Dina Satybaldina	Integration of Cryptography and Navigation Systems in Unmanned Military Mobile Robots: A Review of Current Trends and Perspectives	L.N. Gumilyov Eurasian National University
6	Mohsin Ali, Abdul Razaque, Damelya Yeskendirova, Talgat Nurlybayev, Nessibeli Askarbekova and Zarina Kashaganova	Enhancing Cloud Computing Security through AI-Based Intelligent Intrusion Detection Leveraging Neural Networks and Artificial Bee Colony Optimization	International Information Technology University

7	Tetiana Babenko, Kateryna Kolesnikova, Yuriy Landovsky, Rostyslav Lisnevskyi and Shakirt Makilenov	Definition of Cryptojacking Indicators	International Information Technology University, Taras Shevchenko National University of Kyiv
8	Bindu Ananthula, Niharika Budde, Oleksii Baranovskyi, Andrii Bigdan, Tetiana Babenko and Rostyslav Lisnevskyi	In-Depth Study of Intelligent Healthcare Systems Using 5G Security	Blekinge Tekniska Högskola, Taras Shevchenko National University of Kyiv