

September 25 (Friday)

Venue: Urgench RANCH Technology University (Urgench)

09:00	Participant Registration
10:00	Welcome Words and Plenary Session
10:20	Keynote Speech: Usmon Narzullaev — Includes a 5-minute live demo of Hoaka OS for university labs.
10:50	Keynote Speech: Dmitry Palchunov, Sobolev Institute of Mathematics — "Neuro-symbolic methods for creating artificial reason"
11:30	Keynote Speech: Raafi Careem, Urgench RANCH Technology University — "An Optimized Version of Deep Neural Network Model for Image Classification in Resource-Constrained Mobile Devices"
12:00 – 12:30	COFFEE BREAK

12:30 – 14:00 Technical Session

Track 1: Digital Transformation in Education

9 talks: 5 F2F, 6 virtual · 12:30–14:00, 10 min each

1. 12:30

VIR

Shoira Shukurovna Abdiyeva, Cyber University of Uzbekistan — "A Five-Stage Cognitive Mechanism of Visual Thinking for Solving Graphical Problems: Applications of ChatGPT and GeoGebra"
2. 12:40

F2F

Rustam Yakhshiboyev, Tashkent State University of Economics — "A Standards-Based Framework for Enhancing Distance Education Methodology in Uzbekistan's Digital Economy"
3. 12:50

VIR

Khurshida Ustadjalilova, Kokand University Department of Digital technologies and Mathematics Kokand University — "Education Quality, Human Capital Accumulation, and Sustainable Economic Growth: A Dynamic Cobb–Douglas Model for Uzbekistan"
4. 13:00

F2F

Jumamurod Farhod Ugli Aralov, TUIT — "Adaptive Conversational Tutoring in Extended Reality"
5. 13:10

VIR

Umurbek Ibadillayevich Qushmurotov, Navoiy davlat konchilik va texnologiyalar universiteti — "Human-in-the-Loop Generative AI for Independent Learning in Higher Mathematics: An Interdisciplinary Thesaurus Framework"
6. 13:20

VIR

Diyora Umaralieva, University of World Economy and Diplomacy — "Designing A Digital Discursive Environment For Undergraduate Mathematics: A Human–AI Framework"
7. 13:30

F2F

Tulkun Nasirov, University of geological sciences — "Implementation Lessons as Tests for Informing Pupils from Possible Cyber-Attack"
8. 13:40

VIR

Tabassum Ibragimova, Joint Belorussian - Uzbek intersectoral institute of Applied Technical Qualifications in Tashkent — "Immersive virtual reality pedagogical simulations for developing methodological competence in pre-service teachers"
9. 13:50

VIR

Shirin Primkulova, Westminster International University in Tashkent — "A Rubric-Driven AI-Powered Framework for Scalable Oral Assessment in Education"

14:00 – 15:00	LUNCH BREAK
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15:00 – 15:40 Technical Session (continued)

Track 1: Digital Transformation in Education (continued)

4 talks: 2 F2F, 2 virtual · 15:00–15:40, 10 min each

10. 15:00

F2F

Mehrangiz Murodova, Cyber Univesity — "Predicting Critical-Thinking Gains in GenAI-Assisted Learning: A Multimodal Analytics and Explainable AI Framework"
11. 15:10

VIR

Zuhriddin Akbar o'g'li Nazarov, Cyber University V.I.Romanovskiy Institute of Mathematics — "A New Approach To Modeling Delayed Malware Propagation Via Monte Carlo Branching Process Simulation."
12. 15:20

F2F

Muazzam Artikova, Tashkent University of Information Technology — "A GEOMETRIC AND EVENT-BASED MODEL OF INTERACTIVE AR SCENES IN MARKER-BASED AUGMENTED REALITY"
13. 15:30

VIR

Shoira Shukurovna Abdiyeva, Cyber University of Uzbekistan — "Context-Sensitive TPACK for Digital Transformation in Teaching Linear Functions in Grade 7 Mathematics"

from 15:40 Technical Sessions (parallel)

Track 2: Smart Industry 5.0: IoT, AI & Information Systems Management

19 talks: 5 F2F, 14 virtual · 15:40–18:50, 10 min each

1. 15:40

VIR

Youssef Meissa, Ural Federal University named after the first President of Russia B. N. Yeltsin (UrFU) — "Exploring the Impact of Blockchain Technologies on the Transformation of Organizational Models in the Waste Management Sector"
2. 15:50

F2F

Shohzod Abdusharipov, Urgench State University named after Abu Rayhon Beruni — "Development of a Novel Entropy Source Based on Ni– (Si1–xGex) Diode Structures for Hardware TRNG Systems and Investigation of Their Thermodynamic Fluctuations"
3. 16:00

VIR

Mirkhon Muhammadovich Nurullaev, Bukhara State Technical University — "Deadline-Aware Zero-Trust Enforcement for Industrial Control Systems: A Measured Latency Taxonomy on Modbus/TCP and OPC UA"
4. 16:10

VIR

Urvish Gajjar, Health care service corporation — "The Changing Role of the Software QA Engineer: Navigating the Future of Software Testing in the Age of AI and Generative AI"
5. 16:20

VIR

Rehna Veerankutty Jameela, University of Technology and Applied Sciences Ibri — "An Intelligent Hybrid Human–Robot Interaction Framework for a Solar-Powered Assistive System"
6. 16:30

F2F

Rustamjon Nasridinov, Tashkent University of Information Technologies — "Evaluation Protocol Matters More Than Model Complexity: Lessons from Monthly Streamflow Forecasting in a Snowmelt-Dominated Basin"
7. 16:40

VIR

Azizjon Meliboev, Kokand University Department of Digital technologies and Mathematics Kokand University — "Machine Learning-Based Customer Churn Prediction Cohort-Based Multi-Slicing Approach"
8. 16:50

VIR

Lale Qarayeva, Ministry of Science and Education of the Republic of Azerbaijan Institute of Information Technology — "Application of Missing Data Imputation Methods to Improve Clinical Datasets"
9. 17:00

VIR

Shakhnoza Elchieva, Ministry of Digital Technologies of Republic of Uzbekistan — "The Role of Artificial Intelligence Companies in the Development of the Digital Economy: Development Dynamics and an Analytical Approach"
10. 17:10

F2F

Jihad El-Sana, Ben Gurion University — "Workflow Execution Guides: From Repair Manuals to Executable AR Maintenance Guidance"
11. 17:20

VIR

Dostonbek Islomov, Cyber University — "SHAP-Guided Feature Reduction for Lightweight and Explainable Network Intrusion Detection"
12. 17:30

VIR

Gunel Babanli, Azerbaijan Technical University — "MODEL FOR IMPROVING THE QUALITY OF UNCERTAIN CLUSTERING"
13. 17:40

VIR

Laziza Bahromova, Tashkent University of Information Technologies — "A Cognitive Model of the Staged Extension of Social Security Coverage to Workers in the Formal and Informal Sectors"
14. 17:50

F2F

Maftuxa Zafrullayevna Sayfullayeva, TUIT — "Smart Information System for Modeling Epidemic Spread"
15. 18:00

VIR

Sarvarbek Azimov, Tashkent University of Information Technology — "Development and Validation of a Coupled Three-Stage Mathematical Model for Real-Time Medical Data Transmission and Alerting Systems"
16. 18:10

VIR

Inomjon Ilxomovich Ramatov, Raqamli texnologiyalar va sun'iy intellektni rivojlantirish ilmiy-tadqiqot instituti — "A Two-Stage YOLO11 Pipeline for Road-Scene Perception with Deferred Traffic Sign Classification: Accuracy, Latency and Computational Cost"
17. 18:20

VIR

Bokhodir Mirzaev, Digital technologies and artificial intelligence research institute — "Phishing Web Address Classification Using an Algorithm Ensemble with Boolean Feature Selection and Stochastic Search"
18. 18:30

F2F

Jihad El-Sana, Ben Gurion University — "Toward Automatic Processing of Arabic Historical Manuscripts"
19. 18:40

VIR

Laziza Bahromova, Tashkent University of Information Technologies — "An Information Model for the Staged Extension of Social Security Coverage to Workers in the Formal and Informal Sectors"

Track 3: Advances in Software Engineering

17 talks: 5 F2F, 12 virtual · 15:40–18:30, 10 min each

1. 15:40

VIR

Alibek Rahimberganov, Urgench State University — "Performance Evaluation of Parallel Computing Algorithms Across Programming Languages"
2. 15:50

F2F

Yuliya Kuznetsova, South Ural State University — "Development of Trajectory Planning Algorithms for Collaborative Robot"
3. 16:00

VIR

Kaustubha Shashikant Khandagale, AISSMS IOIT — "Medicare.AI: Design, Implementation, and Safety Evaluation of an Intelligent Healthcare Management Platform"
4. 16:10

VIR

Roshan Dattu Nikam, AISSMS IOIT Pune — "A Web-Based Dairy Product Recommendation and Management System Using MERN Stack"
5. 16:20

VIR

Sarvesh Kumar Gupta, Oracle — "Scalable Distributed Database Architecture for IoT-Enabled Smart Grids"
6. 16:30

F2F

Radmir Salimzyanov, Tomsk State University — "Two-level Markov chain model for benchmark synthesis based on real workload metrics"
7. 16:40

VIR

Urvish Gajjar, Health care service corporation — "AI Large Language Model-Based Framework for Intelligent Software test Automation"
8. 16:50

VIR

Elena Pesotskaya, National Research University Higher School of Economics — "Toward Explainable Large Language Models: Challenges, Failure Modes, and Hybrid Architectures"
9. 17:00

F2F

Marks Yaxshimuradovich Matyakubov, Tashkent University of Information Technologies named after Muhammad al-Khwarizmi — "Computer Modeling of the Non-Stationary Heat Transfer Problem in Axisymmetric Bodies Using the Finite Element Method"
10. 17:10

VIR

Irfan Yusuf, Dubai Electricity & Water Authority — "A Standards-Aligned Cybersecurity Architecture for Hyper-Converged Digital Substations (HCDS)"
11. 17:20

VIR

Rashid Turgunbaev, Kokand State University — "Sample-Based Automatic Metadata Extraction from Academic Articles: A Rule-Based Approach for Multilingual Scholarly Content"
12. 17:30

F2F

Zarnigor Yusupova, Urgench State University named after Abu Rayhan Biruni — "Diffusion-Based Mathematical Model and Numerical Algorithm for Grain-Mixture Cleaning Processes"
13. 17:40

VIR

Egor Sborshchikov, Siberian State University of Telecommunications and Information Science — "A Formal Model of Interpretative Spaces Based on Term Rewriting Systems and Descriptor Constrains"
14. 17:50

VIR

Sabiyah Sabir, The University of Lahore — "Ontology Reasoning for Semantic Validation of Software Design"
15. 18:00

VIR

Shakhzoda Makhmudova, Tashkent University of Information Technologies named after Muhammad al-Khwarizmi — "Performance Optimization of CNN-Based Real-Time Face Recognition Using CUDA and GPU Computing"
16. 18:10

F2F

Nozima Bakhtiyorovna Nozirova, Abu Ali ibn Sina Bukhara State Medical Institute — "Aspect-Based Sentiment Analysis and Adverse Drug Reaction Detection in Patient Feedback"
17. 18:20

VIR

Shakhzod Javliev, Tashkent University of Information Technologies named after Muhammad al-Khwarizmi — "OpenMP-Based Parallelization of the DCT Stage for Accelerated JPEG Image Compression"

September 26 (Saturday)

Venue: Farovon Khiva Hotel (Khiva, parallel sessions in 3 halls)

09:00	Participant Registration
10:00	Welcome Words and Plenary Session (Main Hall)
10:20 – 10:30	Opening Speech: Dr., Asc. Prof., Shukhrat Kayumov, Rector of "Cyber University" State University, Uzbekistan
10:30 – 11:00	Keynote: Dr., Prof., Multi-Ur Rehman, Al-Khwarizmi University — "A numerical method to approximate μ values"
11:00 – 11:30	Keynote: Dr., Prof., Uchkun Kutliev, Urgench State University — "Small-angle ion scattering from ideal and defective surfaces of semiconductor single crystals"
11:30 – 12:00	Keynote: Dr., Asc. Prof. Oybek Allamov, Urgench State University — "Development of Integrated Methods for Applying Green Energy, IoT, and Artificial Intelligence Technologies to Preserve the Ecosystem in the Aral Sea Region"
12:00 – 12:30	Keynote: Dr., Asc. Prof., Elmurod Kuriyozov, Urgench State University — "Automating Corpus Linguistics: LLM Integration and Spatial Analytics in Error Annotation"
12:30 – 12:50	Keynote: Dr., Prof. Dilmurod Saidov, Urgench Ranch University of Technology — "Metrological Characterization of a Multi-Observable Vibration Viscometer: Reference Agreement, Repeatability, Temperature Compensation and Density Cross-Sensitivity"
12:50 – 14:00	LUNCH BREAK

14:00 – 15:50 Parallel Sessions

HALL 1

Track 3: Computational Linguistics & Natural Language Processing (group A)

9 talks: 5 F2F, 4 virtual · 14:00–15:30, 10 min each

1. 14:00

F2F

 Maftuna Yusupjonova, Tashkent State University of Uzbek Language and Literature named after Alisher Navai — "Technical Foundations for Creating a Corpus of Children's Fairy Tales in the Uzbek Language"
2. 14:10

VIR

 Nisha Bairagee, Manav Rachna international institute of research and study — "A Comprehensive Systematic Review of Machine Learning Techniques for Autism Spectrum Disorder Detection and Severity Classification"
3. 14:20

F2F

 Mansur Axmadaliyev, Tashkent University of Information Technologies — "Capability-Gated Safety Evaluation: Separating Competence from Alignment in Low-Resource Language Red-Teaming"
4. 14:30

VIR

 Mamadaliyeva Xadicha Baxodirjon qizi, International islamic academy of Uzbekistan — "Multilingual E5-Based Approach for Evaluating Clustering Fitness of Electronic Documents"
5. 14:40

F2F

 Bahodir Ibragimov, Urgench State University — "Aspect Category Classification of Uzbek University Student Feedback"
6. 14:50

VIR

 Benson Mundia Ndirangu, Jomo Kenyatta University of Agriculture and Technology — "Domain-Adaptive BERT for Multi Aspect-Based Sentiment Analysis"
7. 15:00

F2F

 Anargul Nekessova, L.N. Gumilyov Eurasian National University — "Evidence-Grounded Explainable Fake News Detection for Kazakh and Russian: Measuring the Contribution of Retrieval"
8. 15:10

VIR

 Farrukh Farkhod ugli Boymurodov, Karshi state university — "Linguo-Mathematical Models And Algorithms For Identifying And Correcting Punctuation Errors In Agglutinative Languages"
9. 15:20

F2F

 Mariya Sarsenbaeva, Cyber University — "An AI-Based Relation Extraction from Historical Uzbek Texts: A Transformer-Based Framework and Benchmark Corpus"

HALL 2

Track 5: Computational Linguistics & Natural Language Processing (group B)

9 talks: 5 F2F, 4 virtual · 14:00–15:30, 10 min each

1. 14:00

F2F

 Nilufar Madetbayeva, Digital technologies and artificial intelligence development research institute — "A Hybrid Model Integrating Bayesian Logistic Regression with an Uzbek Phraseological Ontology"
2. 14:10

VIR

 Mukhammadsolikh Tursunov, Oriental University — "Rule-Based Automatic Detection Algorithm for Nouns in Uzbek Texts"
3. 14:20

F2F

 Mahliyo Khamzayevna Eshmatatova, denov institute of entrepreneurship and pedagogy — "Formal Modeling Challenges of Converbial Constructions in the Uzbek Language Based on Parallel Corpus Data"
4. 14:30

VIR

 Fail Gafarov, Kazan Federal University — "Explainable Machine Learning for Predicting Behavioral Continua from Linguistic Indicators"
5. 14:40

F2F

 Madina Samatboyeva, Tashkent State University of Uzbek Language and Literature named after Alisher Navoi — "Morphology-Aware NER for the Uzbek Language: Improving Model Robustness Through Morphological Features"
6. 14:50

F2F

 Gavkhar Nayimova, Cyber Univesity — "An AI-Based Named Entity Recognition Corpus for Uzbek Historical Texts and Evaluation of Transformer Models"
7. 15:00

VIR

 Arman Zhetessov, Farabi University — "A Retrieval and Reasoning Layer for Agent-Based Social Simulation Systems"
8. 15:10

F2F

 Meerim Ryspakova, International University of Kyrgyz Republic — "Morphological Syncretism and Partcipial Annotation in Kyrgyz Universal Dependencies: A Cross-linguistic Comparison with Turkish and English"
9. 15:20

VIR

 Mansur Rafaelevich Khamidullin, Институт Прикладной Семантики — "Hybrid Architecture of the Geolinguistic Module of the TurkLang Platform: PostgreSQL + Memgraph"

HALL 3

Track 4: Computational Neuroscience

3 talks: 2 F2F, 1 virtual · 14:00–14:30, 10 min each

1. 14:00

F2F

 Hasan Rahmat o'g'li Bahromov, Tashkent University of Information Technologies named after Muhammad al-Khwarizmi — "Knife-Edge Point-Spread-Function Identification for Wiener–Hopf Restoration of Motion-Blurred Digital Images"
2. 14:10

VIR

 Gulbahor Xomidjon qizi Abdukadirova, Fergana State Technical University — "Component-Wise Ablation of a Four-Term Compound Loss for 3D Brain Tumor Segmentation"
3. 14:20

F2F

 Abdurahmon Kurbanov, Gulistan State university — "EVALUATION OF HUMAN EMOTIONAL STATE FROM FACIAL EXPRESSIONS USING A LIGHTWEIGHT MOBILENET DEEP NEURAL NETWORK AND THE FACEEMOCDS DATASET"

Track 6: Telecommunications & Radio Engineering

3 talks: 0 F2F, 3 virtual · 14:30–15:00, 10 min each

1. 14:30

VIR

 Yogesh Thakre, Ramdeobaba University — "Intelligent Handover Decision for HetNets Using ML Techniques"
2. 14:40

VIR

 Sevinch Jovlieva, International islamic academy of Uzbekistan — "Performance Analysis of SDN-Based Network Traffic Management Using OpenFlow Protocol"
3. 14:50

VIR

 Ma'ruf Jo'rayev, Cyber university — "Early Ransomware Detection Using Wazuh SIEM, File Integrity Monitoring, and Network Flow Analysis"

15:50 – 16:10

COFFEE BREAK

from 16:10 Parallel Sessions

HALL 1

Track 5: Computational Linguistics & Natural Language Processing (group A, continued)

9 talks: 5 F2F, 4 virtual · 16:10–17:40, 10 min each

10. 16:10

F2F

 Dilnoza Sherzodovna Alisherova, Tashkent State University of Uzbek Language and Literature named after Alisher Navoi — "Automatic Grouping of Uzbek-Language Medical Questions Using Artificial Intelligence: An Architecture and Pilot Study Based on TF-IDF, SVM, and K-Means"
11. 16:20

VIR

 Zarnigor G'anijon qizi Sobirova, Alisher Navoi Tashkent State University of Uzbek Language and Literature — "Punctuation Restoration in Uzbek Texts Using Transformer Models"
12. 16:30

F2F

 Malika Odil qizi Suyunova, Alisher Navoi Tashkent State University of Uzbek Language and Literature — "A Microservice-Based Information System Architecture for Uzbek Text Sentiment Analysis"
13. 16:40

VIR

 Nodirbek Boltayev, Cyber University — "Intent Classification of Citizen Appeals in Low-Resource Uzbek Using Traditional and Transformer-Based Models"
14. 16:50

F2F

 Saidbek Pulatovich Babayazov, Cyber Univesity — "AI-Based Cross-Script OCR Correction for Uzbek and Karakalpak Historical Texts"
15. 17:00

VIR

 G'ayrat Beshimov, "Cyber University" State University — "AI-Based Factual Summarization of Uzbek and Karakalpak News"
16. 17:10

F2F

 Bahodir Ibragimov, Urgench State University — "Synthetic Error Modeling for Low-Resource Karakalpak Spelling Correction"
17. 17:20

VIR

 Nodirbek Boltayev, Cyber University — "Language Identification in Uzbek–Russian–English Code-Switched Social Media Text"
18. 17:30

F2F

 Malika Odil qizi Suyunova, Alisher Navoi Tashkent State University of Uzbek Language and Literature — "A Relational Database Architecture for Uzbek Text Sentiment Analysis Systems"

HALL 2

Track 5: Computational Linguistics & Natural Language Processing (group B, continued)

8 talks: 5 F2F, 3 virtual · 16:10–17:30, 10 min each

10. 16:10

F2F

 Barchinoy Bakhtiyorovna Vohidova, Tashkent State University of Uzbek Language and Literature — "Digitizing the Legacy of Abu Ali ibn Sina: An Interactive Retrieval Platform Based on Traditional Medicine"
11. 16:20

VIR

 Bozorboy Ilkhom ugli Islombekov, Cyber University — "AI-Based Document-Level Extraction of Events and Temporal-Causal Relations from Uzbek News"
12. 16:30

F2F

 Gavhar Bakhronovna Rustamova, Bukhara state university — "Surface-Form Matching for Arboreal Lexical Search in Uzbek: A Per-Term Precision Audit"
13. 16:40

F2F

 Davlatyor Baxtiyarovich Mengliev, Cyber University — "Detecting English Lexical Borrowing and Morphological Hybridization in Uzbek Media Texts"
14. 16:50

VIR

 Bokhodir Mirzaev, Digital technologies and artificial intelligence research institute — "Classification of Phishing Emails Using Frequency-Based Features and Logistic Regression with Adaptive Stochastic Search"
15. 17:00

F2F

 Marjanoy Mamatova, Cyber Univesity — "AI-Based Joint Named Entity Recognition and Entity Linking for Uzbek and Karakalpak News"
16. 17:10

VIR

 Bozorboy Ilkhom ugli Islombekov, Cyber University — "AI-Based Joint Normalization of Uzbek–Russian and Karakalpak–Russian Code-Switched Text"
17. 17:20

F2F

 Davlatyor Baxtiyarovich Mengliev, Cyber University — "Automatic Neutral Reframing of Hostile Messages in Uzbek Legal Mediation"

HALL 3

Track 7: Power Electronics, Energy Conversion & E-Mobility

2 talks: 2 F2F, 0 virtual · 16:10–16:30, 10 min each

1. 16:10

F2F

 Vladimir Shapovalov, Baranov central institute of aviation motor development — "An Integrated Evolutionary-based Framework for Multi-Objective Optimization of High-Frequency Permanent Magnet Synchronous Motors"
2. 16:20

F2F

 Mohammad Imran Mir, SHIV NADAR UNIVERSITY — "Finite-Element-Aided Resonance-Targeted Commutation for Radial-Force and Vibration Reduction in a Four-Phase 8/6 Switched Reluctance Motor"



IEEE AL-KHWARIZMI

September 27 (Sunday)

VENUE: FAROVON KHIVA HOTEL (KHIVA)

09:30	Excursion to Ichan-Kala, Khiva maps.app.goo.gl/XAo9wEWJd2aJXwLW7
Morning – Afternoon	Free Time
15:00 – 15:30	Keynote Speech: Dr. Hamed Farbeh , Associate Professor, PhD in Computer Engineering, Al-Khwarizmi University — <i>"Edge-AI: From IoT to Artificial Intelligence at the Edge"</i>
15:30 – 16:00	Keynote Speech: Dr. Ibraheem Al-Dhamari , Associate Professor in Software Engineering — <i>"Trustworthy AI for Skin Cancer Image Classification"</i>
16:00	Keynote Speech (Live Video): Antonio Luque , IEEE Vice President MGA 2025 — <i>"Visible Light Communication algorithms: A Modern Legacy of al-Khwarizmi"</i>
17:00	Conference Closing and Reception

