

23rd International Conference on
**Next Generation Wired/Wireless
Networks and Systems
(NEW2AN)**

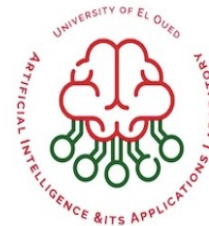
21-23 December 2023

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First Day - 21/12/2023		Location
08:30 AM - 09:20 AM Registration		Front Desk
09:20 - 10:15 AM Opening Ceremony Prof. Muthanna G. Abdul Razzaq , ICDSIS2023 Honorary Chair and President of the American University in the Emirates (AUE), Dubai, UAE Prof. Gulnora Abdurakhmanova , Vice Rector of Tashkent State University of Economics, Uzbekistan Prof. Maqsdjon Yuldashev , Vice Rector of Tashkent State University of Economics, Uzbekistan, Vice Rector of Tashkent State University of Economics, Uzbekistan Prof. Asem Tharwat , Vice President of the American University in the Emirates (AUE), Dubai, UAE		Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=83333191210 Passcode: aue2020
10:15 - 10:45 AM Keynote Prof. Ahmed Elsherbini, Cairo University, Egypt Talk Title: "Distributed Sensing and Intelligent Systems: Current and Future Trends"		Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=83333191210 Passcode: aue2020
10:45 - 11:15 PM Keynote Prof. Sergey Andreev, Professor of Wireless Communications and Academy Research Fellow at Tampere University, Finland Talk Title: "Wireless Technology Solutions for Connected and Immersive Healthcare"		Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=83333191210 Passcode: aue2020
11:15 - 11:30 Coffee Break		Multi-Purpose Room
	Session 1 Communication topics (11:30 -12:30)	CR-2006
	Chair: Prof. Sergey Andreev	
	Link: https://us06web.zoom.us/j/5585330778?pwd=eHZ1V0ZXVDE2ZlJkNEFCWExCQ2JvQT09&omn=85054946051 Passcode: aue2020	
11:30 - 11:40	Doppler Radar Performance for UAV Speed Detection in mmWave/Sub-THz Systems with Directional Antennas Anna Gaydamaka, Andrey Samuylov, Dmitri Moltchanov, Bo Tan	CR-2006
11:40 - 11:50	Link-Level Model for SINR and HPBW Evaluation in 5G mmWave UDN with Location-Aware Beamforming Grigoriy Fokin	CR-2006
11:50-12:00	Detecting PII Leakage Using DPI and Machine Learning in an Enterprise Environment Luka Khorkheli, David Bourne, and Gandeve Bayu Satrya	CR-2006
12:00-12:10	Deep Learning for Preventing Botnet Attacks on IoT Jehad Al-Jaghoub, Noor Mohamed Jibreel, Farhad Maleki, Abdulhakim Jamal Aljohar, Fayeze N Fakhoury, Gandeve Bayu Satrya, and Rita Zougheib	CR-2006

12:10-12:20	Design of Multi-Polarisation MIMO Antenna for Heterogeneous Smartphone Applications Ayat Zaid Al-Zori, Hamid Mohammed Hamid Mohammed Farhan, and Maha Abdulameer Kadhim	CR-2006
12:20-12:30	Potential Possibilities of Voice Pattern Recognition by A Distributed Fiber Optic Sensor Olga Gubareva, Michael Dashkov, Igor Makarov, Vladimir Gureev, and Alexander Evtushenko	CR-2006
12:30 - 1:00	Break, Lunch	Multi-Purpose Room
01:00 - 01:30 PM Keynote Prof. Abbas Amira, Dean of the College of Computing and Informatics, University of Sharjah, United Arab Emirates Talk Title: Exploring the Versatility of Deep Neural Networks: Applications in Digital Health, Energy Efficiency, and Data Insights Visualization		Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=83333191210 Passcode: aue2020
	Session 2 Communication topics (1:30 -2:40): SS-TUL	CR-2006
	Chair: Prof. Yevgeni Koucheryavy	
	Link: https://us06web.zoom.us/j/5585330778?pwd=eHZ1V0ZXVDE2ZlJkNEFCWExCQ2JvQT09&omn=85054946051 Passcode: aue2020	
1:30 - 1:40	Enhancing Wireless Connectivity Through Bayesian-Optimized UAV-BS Positioning and Charging Balaji Kirubakaran and Jiri Hosek	CR-2006
1:40-1:50	Comparison of Centralized and Federated Machine Learning Techniques for Beamtracking in 5G/6G Systems Amjad Ali, Vladislav Prosvirov	CR-2006
1:50-2:00	Exploring the Efficiencies and Vulnerabilities of Smart Door Control Systems: A Systematic Review Salama Almheiri, Shaikah Albreiki, Hessa Alnuaimi, Mahrah Alhmoudi, Salama Almarzooqi, Joseph Henry Anajemba, Nedat Ababneh, and Otuu Obinna Ogbonnia	CR-2006
2:00-2:10	System-Level Model for SINR and HPBW Evaluation in 5G mmWave UDN with Location-Aware Beamforming Grigoriy Fokin	CR-2006
2:10-2:20	Reinforcement Learning Based Power Allocation Optimization for 6G Relay-Assisted HetNets Hayder Faeq Alhashimi, MHD Nour Hindia, Kaharudin Dimyati, Effariza Hanafi, and Tengku Faiz Tengku Mohmed Noor Izam	CR-2006
2:20-2:30	The Impact of Capacity Averaging in Packet-Level Modeling of 5G NR with Blockage and Micromobility Emil Khayrov	CR-2006
2:30-2:40	Interference Mitigation for Reconfigurable Intelligent Surface (RIS)-Aided Non-Terrestrial Base Station (NTBS) in NOMA Downlink HetNets Osamah Thamer Hassan Alzubaidi, MHD Nour Hindia, Kaharudin Dimyati, Kamarul Noordin, and Faizan Qamar	CR-2006
2:40 - 3:00	Coffee Break	Multi-Purpose Room

	Session 3 Communication Topics (3:00-4:40)	CR-2006
	Chair: Prof. Ammar Muthanna	
	Link: https://us06web.zoom.us/j/5585330778?pwd=eHZ1V0ZXVDE2ZWJCNFEFCWExCQ2JvQT09&omn=89567065563 Passcode: aue2020	
3:00 - 3:10	Modeling a Digital Avatar of a Car Drivers Based on the Quantification of the Information Environment Dmitriy Rodionov, Irina Smirnova, Nizomjon Khajimuratov, Zhang Xinyu, Olga Konnikova, Oksana Yuldasheva, and Evgenii Konnikov	CR-2006
3:10 - 3:20	A New Blockage Detection Approach for 6G THz Systems Abdukodir Khakimov, Anatoliy Prikhodko, Evgeny Mokrov, Vyacheslav Begishev, Alexander Shurakov, and Gregory Goltsman	CR-2006
3:20 - 3:30	Real-Time Anomaly Detection in Network Traffic Using Graph Neural Networks and Random Forest Seyed Ebrahim Hosseini	CR-2006
3:30- 3:40	Addressing Security and Privacy Issues in a Smart Environment by Using Blockchain as a Preemptive Technique Seyed Ebrahim Hosseini	CR-2006
3:40- 3:50	The Role of Cryptocurrencies in the Development of Countries and the Fight Against Financial Problems Mirkamol Shokirov	CR-2006
3:50- 4:00	Designing the UzBCS Lending Platform Network Based on Blockchain Technology and Ensuring Transaction Security Kuvonchbek Rakhimberdiev	CR-2006
4:00 - 4:10	Decentralized Blockchain Networks and Economic Security: Balancing Scalability and Security Tradeoffs Rimma Yunusova	CR-2006
4:10 - 4:20	Study of Machine Learning Models for IoT Based Efficient Classroom Usage Olga Yugay, N Yerashenia, and Djuradj Budimir	CR-2006
4:20 - 4:30	Transforming Higher Education: A Comprehensive Analysis of Blockchain Technologies and Digitalization Shakhzod Saydullaev	CR-2006
4:30 - 4:40	Mediating Role of ESG Practices in Determining M&A Premiums in Info-Communications Sergei Grishunin, Ekaterina Burova, Svetlana Suloeva, and Bokhodir Isroilov	CR-2006
4:40 - 4:50	CIDM-BSC: Cross-Platform Infectious Disease Modeling Framework Using Blockchain and Smart Contracts Nghiem Thanh Pham; Khanh Vo; Triet Minh Nguyen; Khiem Gia Huynh; Bang Le; Trinh Dang Phung; Hieu Doan; Khoa Tran	CR-2006
4:50 - 5:00	Comparative Analysis of Botnet and Ransomware for Early Detection Prasad Honnavalli B, Ethadi Sushma, Aditya Rao, Varun S Girimaji, Vrinda S Girimaji, and Achyuta Nandakumar Katta	CR-2006
5:00 - 5:10	Network resources optimization algorithm for robotic systems in 6G networks Lyubov Gorbacheva, Maxim Zakharov, Alexander Paramonov, and Andrey Koucheryavy	CR-2006

5:10 - 5:20	Service Migration algorithm for distributed edge computing in 5G/6G networks Konstantin Kuznetsov, Ekaterina Kuzmina , Tatiana Lapteva, Artem Volkov, Ammar Muthanna and Ahmed Aziz	CR-2006
5:20 - 5:30	Holographic Images Delivery Model Toward 6G Telepresence Services Daniil Svechnikov, Roman Dunaytsev, Ammar Muthanna and Ahmed Aziz	CR-2006
5:30 - 5:40	Comparison of Probabilistic Characteristics of 8-Bit Codes with Direct Error Correction Sergey Vladimerov, Olga Vorozheikina, and Ammar Muthanna	CR-2006
Second Day - 22/12/2023		
9:00 - 09:45 AM Keynote: Hideki Ninomiya, CEO, Orient., Co. Ltd.; Director, Cyber Investigation Knowledge Forum Talk Title: How to align cyber risk management to digital transformation and business strategy Link: TPC		NEW2AN Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=86398471814 Passcode: aue2020
09:45 - 10:00	Coffee Break	Multi-Purpose Room
	Session 1 Applications of AI algorithms and Mobile Technologies (10:00 - 11:30)	CR-2006
	Chair: TBA	
	Link: https://us06web.zoom.us/j/5585330778?pwd=eHZ1V0ZXVDE2ZlJlQ09&omn=89567065563 Passcode: aue2020	
10:00-10:10	Unlocking the Potential of Blockchain Technology in the Digital Economy: A Comprehensive Analysis of Decentralized Social Networking Platforms Oybek Eshbayev	CR-2006
10:10 - 10:20	The Role of Blockchain in Supply Chain Transparency for E-Commerce Muhammad Eid Balbaa and Olim Astanakulov	CR-2006
10:20 - 10:30	Analyzing the Effects of Blockchain Technology on Liquidity Management in Banking Institutions Nasiba Sattarova	CR-2006
10:30 - 10:40	Transformative Impacts of Foundation Models and Language Models on Intelligent Transportation Systems: An In-Depth Review Mohamed R. Shoaib, Heba Emara, and Jun Zhao	CR-2006
10:40-10:50	Models and Algorithms for Decision Making in Intelligent Control Systems Murodjon Sultanov and Gayrat Ishankhodjayev	CR-2006
10:50 - 11:00	AR-Based Mobile Application for Object Detection for Interactive Learning	CR-2006

	Prateek Bhat; Sainath Ingle; Kedar Dhavale; Yuvraj Wadavale; Pranav Shriram	
11:00 - 11:10	Ways of Effective Using of Mobile Technologies in the Development of Recreational Tourism Nigora Yusupovna Shaymanova; Ramazon Alisher ugli Vayskulov	CR-2006
11:10 - 11:20	Applications of Fuzzy Set Models in Optimizing Agricultural Production Structures in Smart Farms Akram Ishnazarov	CR-2006
11:20 - 11:30	Parallel Approaches to Accelerate Deep Learning Processes Using Heterogeneous Computing Shakhzod Javliev	CR-2006
11:30 - 11:45	Coffee Break	Multi-Purpose Room
	Session 2 Intelligent systems (11:45 - 12:55)	CR-2006
	Chair: TBA	
	Link: https://us06web.zoom.us/j/5585330778?pwd=eHZ1V0ZXVDE2ZlJkNEFCWExCQ2JvQT09&omn=89567065563 Passcode: aue2020	
11:45 - 11:55	A Zigbee Monitoring Network Construction Method for Greenhouse Agricultural Environment Ruipeng Tang, Mohamad Sofian Abu Talip, and Narendra Aridas	CR-2006
11:55-12:05	Performance Evaluation of Wired and Wireless NoC in Multicore Architecture Asrani Lit	CR-2006
12:05-12:15	Development of Fully Synthetic Medical Database Shuffling Method Rashid Nasimov, Nigora Nasimova, Bahodir Muminov, Adibaxon Usmanxodjayeva, Guzal Sobirova, and Akmalbek Abdusalomov	CR-2006
12:15 - 12:25	Restriction in Flow Area in Gas Network Rabim Alikulovich Fayziev and Ismatulla Kushayevich Kushayevich Khujaev	CR-2006
12:25-12:35	Numerical Investigation of Laminar-Turbulent Flow in a Suddenly Expanding Channel Rabim Alikulovich Fayziev and Murodil Erkinjon ugli Madaliev	CR-2006
12:35 - 12:45	Experimental Results of Econometric Modeling of Economic Processes Botir Karimov	CR-2006
12:45-12:55	Forecasting ICT Service Exports in Continental Trio Countries Using the ARIMA Model Aziz Zikriyoev, Nodira Zikrillaeva, Sanjar Mirzaliev, Nurbek Turayev, Alisher Sultanov, and Mokhinur Rakhimova	CR-2006
12:55-2:00	Break and Lunch	

<p>2:00 - 02:30 AM Keynote Prof. Ashiq Anjum, Professor of Distributed Systems, University of Leicester, UK Link: TPC Passcode: TPC</p>	<p>Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=86398471814 Passcode: aue2020</p>
<p>Session 3 Application of Digital Technologies for Sustainable Development (2:30 - 4:00)</p>	<p>CR-2006</p>
<p>Chair: TBA</p>	
<p>https://us06web.zoom.us/j/5585330778?pwd=eHZ1V0ZXVDEZ2WJCNFCWExCQ2JvQT09&omn=89567065563 Passcode:aue2020</p>	
<p>2:30-2:40 From Bricks to Bits: Revolutionizing Real Estate for the Digital World Nghiem Thanh Pham, Trinh Dang Phung, Khanh Vo, Triet Minh Nguyen, Bang Le, Khoa Tran, and Ngan Nguyen</p>	<p>CR-2006</p>
<p>2:40-2:50 The Next Horizon in Blood Product Management: Safety, Transparency, and Beyond Trinh Dang Phung, Nghiem Thanh Pham, Bang Le, Ngan Nguyen, Triet Minh Nguyen, Khanh Vo, Khiem Gia Huynh, and Nam Ba Tran</p>	<p>CR-2006</p>
<p>2:50-3:00 Mental Health of a Person as a Result of the Transformation of Socio-Economic System Dmitriy Rodionov, Bokhodir Isroilov, Darya Kryzhko, Mansur Eshov, Irina Smirnova, and Evgenii Konnikov</p>	<p>CR-2006</p>
<p>3:00-3:10 Econometric Analysis of Economic and Ecological Aspects of Sustainable Development of Regions in Terms of Digital Economy Nazirjon Rajabov, Khayrilla Kurbonov, Jakhongir Shaturaev, Ibdullo Khotamov, Marguba Adilova, and Gulshoda Qalandarova</p>	<p>CR-2006</p>
<p>3:10-3:20 Growing Up of Youth in a Connected World: Internet Usage Dynamic is Digital Age or Child Special Quality? Aziz Zikriyoev, Nilufar Ismailova, Muyassar Umarkhodjayeva, and Qobil Isayev</p>	<p>CR-2006</p>
<p>3:20-3:30 Problems of Security of Economic and Ecological Systems in the Countries of the Central Asian Region Azamat Kosimav</p>	<p>CR-2006</p>
<p>3:30-3:40 The Importance of Digitalization in Economic Development of the Government Saidjon Khayitov Khayitov, Fazliddin Choriev, and Asqarova Mavluda</p>	<p>CR-2006</p>
<p>3:40-3:50 The Role of Digital Economy Among Central Asian Countries' Economy Saidjon Khayitov and Ulugbek Komilov</p>	<p>CR-2006</p>
<p>3:50-4:00 Improving the Efficiency of Housing Stock Management in the Context of Digitalization Khurshidjon Kakhramonov and Ravshan Nurimbetov</p>	<p>CR-2006</p>
<p>4:00 - 4:15 Coffee Break</p>	

4:15 - 4:30	Closing Ceremony: Prof. Yevgeni Koucheryavy, the NEW2AN 2023 organizing Chair	Auditorium (Ground Floor) https://us06web.zoom.us/j/4617295687?omn=86398471814 Passcode: aue2020
Third Day for Additional Online Presentations - 23/12/2023		
Session 1. Digital Business (10:00 -1:00): SS-TUL		
Chair: TBA		
10:00- 10:10	Tailoring Marketing Strategies for Food Products Within the Dynamics of Context and Location-Aware Pervasive Systems Shaxnoza Ergashxodjayeva	Online
10:10- 10:20	Navigating the Digital Landscape: Enhancing Service Discovery and Portability in Digital Marketing Strategies Maksud Kurolov	Online
10:20- 10:30	The Role Of Digital Development In The Reinforcement Of The Government Social Protection System Of Uzbekistan Maksud Kurolov	Online
10:30- 10:40	Enhancing Digital Market Research Through Distributed Data and Knowledge-Based Systems: Analyzing Emerging Trends and Strategies Nafosat Sharopova	Online
10:40- 10:50	Investigating the Dynamics of Digital Marketing in Enterprises with Advanced Data Capturing and Networking Technology Dilaram Matrizayeva	Online
10:50 - 11:00	A Comparative Analysis of Financing Methodologies for Innovative Business Projects Within Digital Ecosystems Janabay Isakov	Online
11:00 - 11:10	Features of Regional Innovative Development of Small and Medium Business Bakhtiyor Salimov	Online
11:10 - 11:20	Criteria and Assessment of Opportunities for Creating Digital Ecosystems by 5G Mobile Operators Valery Tikhvinskiy, Roman Umanskiy, and Sergey Falko	Online
11:20 - 11:30	Strategic Analysis of Business Positioning Through Web Intelligence Technologies: A Study on Adaptive Models and Approaches Laylo Abdukhaliyeva	Online
11:30 - 11:40	Gravity Model of Foreign Economic Processes of Central Asian Countries Munisa Turdibaeva	Online
11:40 - 11:50	The Impact of the ICT and Export Diversification on Income Inequality: Panel Quantile Regression Analysis Gavkhar Sultanova, Rano Djuraeva, and Aziza Usmanova	Online
11:50 - 12:00	Utilities of Chat Bots in Teaching Russian as Foreign Language at Higher Education Institutions Shakhnoza Tuychibaeva and Aziza Usmanova	Online
12:00- 12:10	Edge Caching Cooperation in NDN Scenarios for Self-Organizing Networks Sviatoslav Iakimenko	Online