

"Artificial Intelligence in Engineering and Technology Education" (AIETE - 2024), International scientific and educational conference PROGRAM

February 28-29, 2024

00

Almaty, Kazakhstan

PROGRAM COMMITTEE

CO-CHAIRS:

- 1. Zhumagulov Bakytzhan, President of the National Engineering Academy of the Republic of Kazakhstan, Academician of the National Academy of Sciences of the Republic of Kazakhstan, Doctor of Technical Sciences, Professor, Kazakhstan
- 2. Ahmed-Zaki Darkhan, Vice-Minister of Science and Higher Education of the Republic of Kazakhstan, Doctor of Technical Sciences, Professor, Kazakhstan

ЧЛЕНЫ:

- 1. Gulnar Sarsenbekova, Rector of the International Engineering Technological University, Candidate of Philosophy, Associate Professor, Kazakhstan
- 2. Khikmetov Askar, Rector of the International University of Information Technologies, Candidate of Physical and Mathematical Sciences, Corresponding Member of National Engineering Academy of the Republic of Kazakhstan, Kazakhstan
- 3. Tuleshov Amandyk, vice-president of National Engineering Academy of the Republic of Kazakhstan, doctor of physical and mathematical sciences, professor, Kazakhstan
- 4. Denisova Natalya, director of the department of information technologies, vice-rector for informatization of East Kazakhstan Technical University named after D. Serikbaeva, Kazakhstan
- 5. Abdibekov Ualikhan, academician of National Engineering Academy of the Republic of Kazakhstan, doctor of physical and mathematical sciences, professor, dean of the Faculty of Mechanics and Mathematics, Kazakh National University named after al-Farabi, Kazakhstan
- 6. Turar Olzhas, PhD, associate professor, Dean of the Faculty of Information Technologies, Kazakh National University named after al-Farabi, Kazakhstan
- 7. Ibraymov Margulan, PhD, associate professor, Director of the Department of Science and Innovation, Kazakh National University named after al-Farabi, Kazakhstan
- 8. Kaltaev Aidarkhan, Academician of National Engineering Academy of the Republic of Kazakhstan, Doctor of Physical and Mathematical Sciences, Professor of Kazakh National Technical University named after Satpaev, Kazakhstan
- 9. Matthias Meinke, Professor, Rhine-Westphalia Technical University Aachen, Germany
- 10. Mohanraj Murugesan, professor at the Department of Engineering Mechanics, Hindustan College of Engineering and Technology, India
- 11. Kabanihin Sergey, Corresponding Member of the Russian Academy of Sciences, Doctor of Physical and Mathematical Sciences, Professor, Institute of Computational Mathematics and Mathematical Geophysics of the Siberian Branch of the Russian Academy of Sciences, Russia



- 12. Helvachi Mustafa, PhD, Institute of Informatics at Istanbul Technical University, Turkey
- 13. Veliyev Eldar, PhD, Professor, Institute of Informatics at Istanbul Technical University, Turkey
- 14. Kuleshov Alexey, Doctor of physical and mathematical sciences, researcher, Institute of radiophysics and electronics named after A.Usikov of the National Academy of Sciences of Ukraine
- 15. Wojcik Waldemar, Doctor of Technical Sciences, Professor at the Technical University of Lublin, Poland
 - 16. Kisala Piotr, PhD, professor, Technical University of Lublin, Poland
- 17. Tusupov Jamalbek, Doctor of Physical and Mathematical Sciences, Professor, Eurasian National University named after L.N. Gumilev, Kazakhstan
- 18. Bektemesov Maktagali, corresponding member of National Engineering Academy of the Republic of Kazakhstan, doctor of physical and mathematical sciences, professor, Kazakh National Pedagogical University named after Abaya, Kazakhstan
- 19. Rysbayuly Bolatbek, Professor, International University of Information Technologies, Kazakhstan
 - 20. Urmashev Baydaulet, acting Professor, Candidate of Physical and Mathematical Sciences, Al-Farabi Kazakh National University, Kazakhstan
 - 21. Mansurova Madina, Candidate of Physical and Mathematical Sciences, Associate Professor, Al-Farabi Kazakh National University, Kazakhstan
 - 22. Mausumbekova Saule, Candidate of Physical and Mathematical Sciences, Associate Professor Al-Farabi Kazakh National University, Kazakhstan
 - 23. Shynar Musiralieva, Candidate of Physical and Mathematical Sciences, Associate Professor, Al-Farabi Kazakh National University, Kazakhstan
 - 24. Madina Tungatarova, PhD, Associate Professor, Satpayev Kazakh National Technical University, Kazakhstan
 - 25. Belyaev Erzhan, PhD, Associate Professor, Al-Farabi Kazakh National University, Kazakhstan
 - 26. Timur Imankulov, PhD, Associate Professor Al-Farabi Kazakh National University, Kazakhstan
 - 27. Doszhan Nursultan, Deputy Dean for Scientific and Innovation Work and International Relations, PhD, Al-Farabi Kazakh National University, Kazakhstan
 - 28. Baygereev Dosan, PhD, Associate Professor, East Kazakhstan University named after Sarsen Amanzholov
 - 29. Temirbekov Almas, PhD, Associate Professor, Al-Farabi Kazakh National University, Kazakhstan
 - 30. Bektemesov Zholaman, PhD, Associate Professor, Al-Farabi Kazakh National University, Kazakhstan
 - 31. Daribaev Beimbet, PhD, Associate Professor Al-Farabi Kazakh National University, Kazakhstan
 - 32. Erkebulan Nalibaev, PhD, senior lecturer, Al-Farabi Kazakh National University, Kazakhstan



- 33. Medetov Bekbolat, PhD, associate professor S. Seifullin Kazakh Agrotechnical Research University
- 34. Zhetpisbaeva Ainur, PhD, associate professor S. Seifullin Kazakh Agrotechnical Research University
- 35. Chezhimbaeva Katipa, Candidate of Technical Sciences, Associate Professor, Almaty University of Energy and Communications named after G. Daukeev
- 36. Jarykbassov Daniyar, PhD, Chief Engineer of Distribution Zone Otegen Batyr, Corporate «Alatau Zharyk Companyasy»

ORGANISING COMMITTEE

CHAIRPERSONS:

- 1. Temirbekov Nurlan, Vice-President of the National Engineering Academy of the Republic of Kazakhstan, academician of the National Engineering Academy of the Republic of Kazakhstan, corresponding member of the National Academy of Science of the Republic of Kazakhstan, professor, Kazakhstan
- 2. Zhakebaev Dauren, President of the International Engineering Technological University, corresponding member of National Engineering Academy of the Republic of Kazakhstan, professor, Kazakhstan

MEMBERS:

- 1. Imangaliev Ernar, chief scientific secretary of the National Engineering Academy of the Republic of Kazakhstan, candidate of physical and mathematical sciences, corresponding member of the National Engineering Academy of the Republic of Kazakhstan, Kazakhstan
- 2. Karuna Oksana, Vice-Rector for Strategic Development, Science and International Relations, PhD, Associate Professor, International Engineering Technological University, Kazakhstan
- 3. Akpanbetov Darkhan, Vice-Rector for Academic Affairs and Industrial Practice, Candidate of Technical Sciences, Associate Professor, International Engineering Technological University, Kazakhstan
- 4. Tatibekov Bauyrzhan, Director of the Department of Scientific Work and International Cooperation, Candidate of Economic Sciences, Associate Professor, International Engineering Technological University, Kazakhstan
- 5. Magzhan Sarsembayev, Head of the Department of Software Engineering, International Engineering Technological University, Kazakhstan
- 6. Akmaral Tolegenova, PhD, Head of the Department of "Smart Technologies in Engineering", International Engineering Technological University, Kazakhstan
- 7. Mazakov Talgat, Doctor of Physical and Mathematical Sciences, Professor, International Engineering Technological University, Kazakhstan
- 8. Kadyrakunov Kubanych, candidate of physical and mathematical sciences, associate professor, International Engineering Technological University, Kazakhstan
- 9. Takabaev Takhir, Candidate of Technical Sciences, Associate Professor, International Engineering Technological University, Kazakhstan
- 10. Zhanturin Malik, Candidate of Technical Sciences, Associate Professor, International Engineering Technological University, Kazakhstan
- 11. Bektemesov Amanzhol, PhD, associate professor, International Engineering Technological University, Kazakhstan
- 12. Ibraev Aidos, PhD, associate professor, International Engineering Technological University, Kazakhstan
 - 13. Aizhanova Aliya, lecturer at International Engineering Technological University
- 14. Nurgalyeva Rakhilya, lecturer at International Engineering Technological University
- 15. Demeubaeva Laura, lecturer at International Engineering Technological University
- 16. Ashirbekov Bauyrzhan, International Engineering Technological University specialist
- 17. Myrzakhanova Karakoz, International Engineering Technological University specialist



International scientific and educational conference "Artificial Intelligence in Engineering and Technology Education"

(AIETE-2024)

February 28, 2024

Venue: Almaty, International Engineering Technological University

Time	Event		Location
09.00 - 09.55	Registration of conference participants		Hall, academic building No. 2
10.00 10.0E			
10.00 - 10.05	Opening of the international		Conference hall,
	scientific and educational		academic building No. 2
	conference and opening remark	'KS	
10.05 - 10.20	Greeting		Conference hall,
			academic building No. 2
10.20 - 11.30	Plenary session		Conference hall,
			academic building No. 2
11.30 - 11.50	Coffee break		
11.50 - 13.00	Master Class		Conference hall,
			academic building No. 2
13.00 - 14.00	Lunch		
14.00 - 14.40	Exhibition		Sports hall,
			academic building
			No. 2
14.40 - 15.00	Signing cooperation		Conference hall,
	agreements		academic building No. 2
15.00 - 16.10			Conference hall,
/ 6			academic building No. 2
16.10 - 16.20	Coffee break		
16.20 - 17.00	Breakout session		Conference hall,
//			academic building No. 2
17.00 - 18.00	Summing up the results of		Conference hall,
	the first day of the		academic building No. 2
	conference. Discussion and		
	recommendations		
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International scientific and educational conference "Artificial Intelligence in Engineering and Technology Education" (AIETE-2024)

February 29, 2024

Venue: Almaty, International Engineering Technological University

Time	Event	Location
09.00 - 09.15	Registration of conference	Hall, academic building
	participants	No. 2
09.15 - 10.40	Master Class	Conference hall,
	9 /	academic building No. 2
10.40 - 11.50	Sectional meeting	Conference hall,
		academic building No. 2
11.50 - 12.00	Coffee break	
12.00 - 13.30	Breakout sessions	Conference hall,
/ " /		academic building No. 2
13.30 - 14:30	Lunch	
14.30 - 15.30	Sectional meeting	Conference hall, academic
///		building No. 2
15.30 - 16.00	Closing of the conference	Conference hall,
		academic building No. 2
16.00 - 16.30	Award ceremony	Conference hall,
		academic building No. 2



PROGRAMM

"Artificial Intelligence in Engineering and Technology Education" (AIETE-2024),

International scientific and educational conference February 28-29, 2024 Almaty, Kazakhstan

	02/28/2024, Wednesday	
	onal building No. 2, 2nd floor, conference room	
09.00 - 09.55	Registration of conference participants	
10.00	Opening of the international scientific-	
LL Y	educational conference and opening remarks	
	Greeting	
10.00 - 10.10	Zhumagulov Bakytzhan, President of the National Engineering Academy of the Republic of Kazakhstan, Academician of the National Academy of Sciences of the Republic of Kazakhstan, Doctor of Technical Sciences, Professor, Kazakhstan	
10.10 - 10.20	Ahmed-Zaki Darkhan, Vice-Minister of Science and Higher Education of the Republic of Kazakhstan, Doctor of Technical Sciences, Professor, Kazakhstan	
	Plenary session	
Moderator: Zhakeba	ev Dauren, President of IETU, professor	
10.20 - 10.30	Plenary report 1: Development of a	
	scientific and educational cluster	
	using cloud computing technologies	
. 7	Full name: Temirbekov Nurlan	
72	Position: Vice President, Professor Place of work: Al-Farabi Kazakh National University	
10.30 - 10.40		
10.30 - 10.40	Plenary report 2: Experience and prospects for introducing three-year education based on trimesters	
	in Kazakhstani universities	
	Full name: Turar Olzhas	
	Position: Dean of the Faculty of Information Technology,	
	Associate Professor	
	Place of work: Al-Farabi Kazakh National University	
10.40 - 10.50	Plenary talk 3: Educational programs on artificial	
	intelligence: trends and prospects Full name: Mansurova Madina	



/ /	Position: Head of the Department of Artificial Intelligence	
	and Big Data, Professor	
10.50 11.00	Place of work: Al-Farabi Kazakh National University	
10.50 - 11.00	Plenary talk 4: Online monitoring system for	
	groundwater in the Aral Sea region based on the	
	Internet of Things	
	Full name: Saymanov Islambek	
	Position: PhD, associate professor	
	Place of work: National University of Uzbekistan named after	
11.00 - 11.10	Mirzo Ulugbek	
11.00 - 11.10	Plenary talk 5: From cloud AI to embedded AI in	
	cardiovascular health assessment Full name: Octavian Adrian Postolache	
) ///	Position: professor Place of work: ISCTE - University Institute of Lisbon (ISCTE-	
/ 6	IUL)	
11 10 11 20		
11.10 - 11.20	Plenary talk 6: Intelligent systems	
	Full name: Mamyrbaev Orken Position, Doputy Coporal Director, Associate Professor	
	Position: Deputy General Director, Associate Professor	
	Place of work: RSE "Institute of Information and Computing Technologies"	
11.20 - 11.30	Plenary talk 7: Development of highly efficient gas sensors	
11.20 11.50	for industrial enterprises	
	Full name: Ibraymov Margulan	
	Position: Director of the Department of Science and Innovation	
11.30 - 11.50	Coffee break	
7.6	Master Class	
Moderator: Karuna	Oksana, Vice-Rector for Strategic Development, Science and	
International Relation	ns, IETU	
11.50 - 12.00	Theme 1: Dominant trends in the development of	
	universities in 2024: convergence of science for the	
	purpose of commercialization of innovative results	
	Full name: Karuna Oksana	
	Position: Vice-Rector for Strategic Development, Science and	
	International Relations, Associate Professor	
	Place of work: International University of Engineering and	
12.00 - 12.10	Technology Thoma 2: Intalligent field	
12.00 - 12.10	Theme 2: Intelligent field Full name: Shilanbaev Batyrzhan	
	Position: Deputy Director of the Department of Production	
	Automation and Digitalization	
	Place of work: JV KazGerMunai LLP	
12.10 - 12.20	Theme 3: Application of artificial intelligence in	
	education	
	Full name: Kuatbaev Aibek	



	Paritians Canaval Disaster Place of	
///	Position: General Director Place of work: Bugin Holding LLP	
12.20 - 12.30	Theme 4: Low-code and AI: the future of	
	efficient application development	
	Full name: Kurkebaev Ruslan	
	Position: Founder & CEO	
	Place of work: Axellero.io LLP	
12.30 - 12.40	Theme 5: Online insurance settlement	
	Full name: Ashkeev Olzhas Malikuly	
9 /	Position: Deputy Chairman of the Board	
	Place of work: JSC "Insurance Payment Guarantee Fund"	
12.40 - 12.50	Theme 6: Cloud engineering	
	Full name: Artem Prima, SadykovNurbek	
	Position: developer	
/6	Place of work: LLP "qCloudy"	
12.50 - 13.00	Theme 7: Application of AI in credit risks	
	Full name: Akhmer Ermek	
	Position: Deputy Director for Retail Risks Place of work:	
	Jusan bank JSC	
13.00 - 14.00	Lunch	
14.00 -14.40	Exhibition of Intelligent Products	
14.40 45.00	Venue: Sports hall, educational building No. 2	
14.40 - 15.00	Signing cooperation agreements	
Moderator: Zhakeba	Breakout session aev Dauren, President of IETU, professor	
15.00 - 15.10	Sectional report 1: Development of educational programs	
	for training specialists in IT and IoT areas	
	Full name: Urmashev Baydaulet	
16/	Position: professor	
	Place of work: Al-Farabi Kazakh National University	
15.10 - 15.20	Sectional report 2: Research and modeling of dom-	
	based xss vulnerability identification	
	Full name: Normatov Ibrakhimali	
	Position: professor	
/ \	Place of work: National University of Uzbekistan named after	
	Mirzo Ulugbek	
15.20 - 15.30	Sectional report 3: Modeling problems of renewable	
	thermal power engineering using modern computing	
/	tools	
	Full name: Belyaev Erzhan Kelesovich	
	Position: professor	
	Place of work: Al-Farabi Kazakh National University	



15.30 - 15.40	Sectional report 4: Integration of artificial intelligence
	and the Internet of things in education
	Full name: Nalibaev Erkebulan Position: PhD, senior lecturer
	Place of work: Al-Farabi Kazakh National University
15.40 - 15.50	Sectional report 5: Adaptive educational systems. Using artificial intelligence to improve the educational experience in engineering and technology disciplines Full name: Sarsembayev Magzhan Position: Head of the Department of "Software Engineering" Place of work: International Engineering Technological University
15.50 - 16.00	Sectional report 6: Internet of things in engineering education: Technologies, applications and
/ 6	development prospects
	Full name: Tolegenova Akmaral Position, Head of the Department of "Smart Tochnologies in
///	Position: Head of the Department of "Smart Technologies in Engineering"
///	Place of work: International Engineering Technological
	University
16.00 - 16.10	Sectional report 7: Exploration of Neural Networks in Virtual Reality
90	Full name: Inkarbekov Medet
	Position: PhD, Postdoctoral researcher
	Place of work: Maynooth University
16.10 - 16.20	Coffee break
16.20 - 16.30	Sectional report 8: New Applications of Artificial
/6/	Intelligence Full name: Sarmanbetov Sanzhar Position: senior
	lecturer
	Place of work: Al-Farabi Kazakh National University
16.30 - 16.40	Sectional report 9: AI in identifying aging markers
	Full name: Suleimenova Madina Position: lecturer Place of work: International University of Information
	Technology
16.40 - 16.50	Sectional report 10: Training of engineering personnel:
	on the implementation of the educational program
	"Robotic systems" Position: Associate Professor
	Position: Associate Professor Full name: Zhumasheva Zhadyra
	Place of work: Al-Farabi Kazakh National University
16.50 - 17.00	Sectional report 11: Development of a Wearable Device
	for Human Health



17.00 - 18.00	Summing up the results of the first day of the conference. Discussion and recommendations	
	Full name: Zholdas Nurasyl Position: Lecturer Place of work: Al-Farabi Kazakh National University	

(p)	02/29/2024, Thursday	
International Engineering Technological University,		
	l building No. 2, 2nd floor, library conference room	
09.00 - 09.15	Registration of conference participants	
Moderator: Sarsemi	Master Class bayev Magzhan, head of the department "Software Engineering"	
rioderatori Sarsemi	bayev Hagzhari, fieda of the department "Software Engineering	
9.15 – 9.30	Theme 1: Automated CRM system for Kaspi	
	store using AI technologies	
	Full name: Zhuravlev Andrey	
9.30 – 9.50	Position: Founder Thoma 2: Artificial Intelligence in Education	
9.30 - 9.30	Theme 2: Artificial Intelligence in Education	
) /	Full name: Abilyakimova Aida Position: co-founder	
	Place of work: Qalamedutech LLP	
9.50 - 10.10	Theme 3: Prospects for developers in the field of AI	
	Full name: Kayyrbaev Kuanysh, Kadyrov Madiyar	
///	Position: developer, AI and blockchain specialist	
	Place of work: Nimbl Academy	
10.10 - 10.25	Theme 4: Artificial intelligence in medicine	
	Full name: Kazymbetov Aknazar	
	Position: Head of Antifraud Department	
	Place of work: Wildberries LLC	
10.25 - 10.40	Theme 5: Automation of business processes through	
	software development and implementation of IoT	
9 7	technologies	
1	Full name: Rakhmetulaeva Sabina Position:	
	Head of business/system analysis Place of	
6/	work: Alabs.team LLP Breakout sessions	
Moderator: Akmaral	Tolegenova, head of the department of "Smart Technologies in	
Engineering"	Tolegenova, nead of the department of Smart recimologies in	
10.40 - 10.50	Sectional report 1: Solving Large Logical Equations	
	Full name: Berdymurodov Mansur	
1))	Position: Lecturer	
	Place of work: Perfect University	
10.50 - 11.00	Sectional report 2: Robotics at MITU: Research and	
	Development, Training and Future Directions	
	Full name: Ibraev Aidos	
	Position: Associate Research Professor	
	Place of work: International Engineering Technological	
44.00 44.40	University	
11.00 - 11.10	Sectional report 3: Application of artificial intelligence	
	in biotechnology: from training to innovation	



	Full name: Korotetsky Ilya Position: Research Professor Place of work: International Engineering Technological University
11.10 - 11.20	Sectional report 4: Application of machine learning methods to study the negative effects of urban air pollution on the environment Full name: Kasenov Syrym Position: associate professor Place of work: Al-Farabi Kazakh National University
11.20 - 11.30	Sectional report 5: Speaker Recognition Based on a Limited Speech Corpus Full name: Turdagululy Musa Position: Head of the rating center Place of work: K.I. Satpayev Kazakh National Research Technical University
11.30 - 11.40	Sectional report 6: Astrophysics data processing with artificial intelligence Full name: Eskendir Ashimov Position: Lecturer Place of work: Al-Farabi Kazakh National University
11.40 - 11.50	Sectional report 7: Application of neural networks to predict the development curves of technological blocks of uranium deposits Full name: Aizhulov Daniyar Position: Senior Researcher Place of work: K.I. Satpayev Kazakh National Research Technical University
11.50 - 12.00	Coffee break
12.00 - 12.10	Sectional report 8: Nonreciprocal wave propagation in a nonlinear chain Full name: Rakhymzhanova Anar Position: Associate Professor Place of work: Astana IT University
12.10 - 12.20	Sectional Report 9: Investigation of the possibility of non-invasive glucose level measurement in patients with diabetes Full Name: Sarsembayeva Talshyn Position: doctoral student Place of work: Al-Farabi Kazakh National University



12.20 - 12.30	Sectional report 10: Development of algorithms for controlling the movement of satellites in a constellation	
	Full name: Doszhan Nursultan	
	Position: Deputy Dean of the Faculty of Mechanics and Mathematics, for scientific and innovative work and	
12.30 - 12.40	Sectional report 11: Innovative teaching methods using	
	artificial intelligence technologies	
	Full name: Sydykova Makhabbat Position: Associate Professor	
	Place of work: Kyrgyz National University named after J.	
	Balasagyn	
12.40 - 12.50	Sectional report 12: Designing an Automated	
	Intelligent HVAC System for Smart Buildings Full name: Iskendirov Bolat	
	Position: master's student	
/ 6	Place of work: Al-Farabi Kazakh National University	
12.50 - 13.00	Sectional report 13: Elements of artificial intelligence	
	in independent presentation of languages	
	Full name: Bayachorova Batygul	
	Position: Head of the Department of Software Engineering and Computer Technologies	
	Place of work: Kyrgyz National University named after	
	Zhusup Balasagyn	
13.00 - 13.10	Sectional report 14: Analysis of Spatio-Temporal	
1 6	Convolutional Neural Networks for Action Detection Tasks	
9 1	Full name: Azatbekuly Nurtugan	
	Position: doctoral student	
	Place of work: Al-Farabi Kazakh National University	
13.10 - 13:20	Sectional report 15: Artificial intelligence and tasks	
	without words Full name: Pavel Pankov	
	Position: laboratory manager	
	Place of work: Institute of Theoretical and Applied	
	Mathematics of the National Academy of Sciences of the	
12.20 12.20	Kyrgyz Republic	
13.20 - 13.30	Sectional report 16: Solvability of a degenerate third- order differential equation	
	Full name: Marat Aigerim	
	Position: doctoral student	
	Place of work: The National Pedagogical University named	
12.20 11.20	after Abay	
13.30 - 14.30	Lunch	



Sectional report 17: I urban irrigation mini gu Full name: Amanova Raikh Position: Lecturer Place of work: Al-Farabi Ka	nan
Based XSS Vulnerability Full name: Yarashov Inom Position: doctoral student	-
for echocardiography in Full name: Zhanabekov Zh Position: doctoral student	
15.10 - 15.20 Breakout Paper 21: S	
15.20 - 15.30 Breakout Paper 22: Sma System Full name: Zaitin Erlan Position: doctoral student Place of work: Al-Farabi Ka	azakh National University
_	on the results of the international conference "Artificial Intelligence in gy Education"
16.00 - 16.30 Award ceremony	







