THE PURPOSE AND ROLE OF ARTIFICIAL INTELLIGENCE IN SOCIETY.

Abdrazaxova Gulnaz Ongarbaevna,

Karshi State Technical University,

Student of the Department of Telecommunication Technologies

Annotation. *This article discusses artificial intelligence (AI) as one of the central directions of technological development in recent years. The development of AI technologies is leading to profound changes in various areas of society. Its main goal is to simulate human mental activity, as well as to help solve complex problems. Understanding the role of AI systems in society, their tasks and prospects is important not only from a technological, but also from a social, economic and ethical perspective.*

Key words: *artificial intelligence (AI), technological development, central directions, society, human mental activity, simulation, complex problems, social, economic and ethical perspectives.*

Аннотация. *В данной статье рассматривается искусственный интеллект (ИИ) как одно из центральных направлений развития технологий последних лет. Развитие технологий ИИ приводит к глубоким изменениям в различных сферах общества. Его главная цель — имитация мыслительной деятельности человека, а также помощь в решении сложных задач. Понимание роли систем ИИ в обществе, их задач и перспектив важно не только с технологической, но и с социальной, экономической и этической точки зрения.*

Ключевые слова: *искусственный интеллект, технологическое развитие, центральные направления, общество, умственная деятельность человека, моделирование, сложные проблемы, социальные, экономические и этические перспективы.*

Artificial intelligence is having a major impact on our society today. It is revolutionizing areas such as the economy, technology, medicine, transportation, and education.

Artificial intelligence systems enable rapid and accurate analysis of large amounts of data. For example, in healthcare, AI is used to analyze patient medical histories and select treatment options.

Artificial intelligence systems accelerate everyday human tasks, such as collecting, organizing, and processing data, which increases work efficiency.

Artificial intelligence plays a major role in developing innovative solutions. AI opens up new opportunities for creating new products, services, and technologies.

AI is the ability of computer systems to think, make decisions, learn, solve problems, and use their experience like humans. It is used in many fields today.

The emergence of artificial intelligence dates back to the 1950s, with Alan Turing's "Turing test" and his question "can machines think?".

1950s — creation of computers and programs. 1980s — neural networks and medical care management systems. Since the 2010s, the development of deep learning and big data capabilities.

AI applications, such as voice assistants, facial recognition systems, self-driving cars, and more, have become a part of our daily lives.

Systems that are capable of performing only a few or specific tasks. For example, recommender systems, chatbots, industrial robots.

Artificial General Intelligence (AGI): A system with general human-like thinking abilities. This technology is not yet developed, but it is possible in the future.

Artificial intelligence that is far superior to human intelligence. This is still science fiction, but some scientists believe it is a future possibility.

This is an important part of the SI network, which allows machines to learn from experience. In this way, the system improves itself and works more efficiently.

A technology that uses neural networks to perform complex tasks. This technology allows computers to perform image recognition, natural language processing, and other advanced tasks.

Natural Language Processing (NLP): The ability to understand and process human language. Voice assistants, automatic translation, and other applications use NLP technology.

Analyzing medical images, developing drugs, assisting in diagnosis, and monitoring patients.

Fraud detection, automated trading, risk management. In transportation: Self-driving cars, creating efficient transportation systems, increasing road safety.

Individualization of the education system, learning processes adapted to students.

Increase efficiency, complete complex tasks quickly and accurately, save human resources, create new opportunities.

Job losses, threats to data security and privacy, information manipulation, uncontrolled development of artificial intelligence.

New capabilities of artificial intelligence, technology upgrades, and the development of human-controlled technologies.

How SI affects social systems, the emergence of new professions and the disappearance of existing ones.

The role of artificial intelligence systems in society is very wide and affects various areas. Below are some of the most important aspects of these impacts:

The impact of AI on society raises a number of ethical and social issues. These issues include:

AI systems are often based on personal data. This poses serious privacy risks. Personal data can be misused, illegally distributed, or abused.

AI systems must be impartial in their decision-making. If AI systems are trained on inaccurate data or decisions are based on bias (personal opinions and uncertainties), this can exacerbate inequality in society.

The future of artificial intelligence is very bright and wide-ranging. It will continue to play an important role in simplifying human life, increasing work efficiency and creating new opportunities. However, along with its development, new problems may also arise, such as job losses, the need for new laws and regulations, as well as issues of developing ethical rules.

The goals and objectives of artificial intelligence are leading to major changes in society. It allows improving human mental activity and increasing efficiency in

many areas. However, along with its development, ethical and social issues are also emerging. Therefore, it is necessary to be careful when applying AI technologies to society and monitor their impact.

Therefore, for the successful application of artificial intelligence in society, it is very important to set the right directions for its development and use. It is necessary to constantly monitor and manage the social, economic and cultural impact of AI technologies in society, ensuring that they serve the interests of society.

The relationship between humans and machines: The development of AI will change how humans relate to machines. The social and psychological relationship between humans and machines will be reshaped, raising new ethical questions.

Artificial intelligence plays an important role in the development of healthcare systems in medicine. With the help of artificial intelligence, the accuracy of diagnosis increases, and diseases can be detected at an early stage. For example, in the fields of oncology and cardiology, computers and AI algorithms work effectively in analysis and forecasting.

Artificial intelligence allows for individual assessment of students, adaptation of teaching methods, and making education systems more efficient. It facilitates the personalization of education by providing learning materials tailored to the needs of students.

The use of artificial intelligence creates the possibility of replacing workers in many industries. This requires new jobs and skills. Automation processes through AI will replace laborious and repetitive tasks with more creative and complex tasks. However, this can also create new social problems, such as increased unemployment.

Artificial intelligence is a future field full of opportunities and risks. It continues to change our daily lives. It is very important to find a balance, manage it properly and be based on ethical rules.

Exploiting the development of SI technologies, with which many social and economic problems can be solved.

REFERENCES:

1. Benzerara, M., Guedaoura, H., Anas, S. M., Yolchiyev, M., & Daminova, B. (2024). Advanced Strengthening of Steel Structures: Investigating GFRP Reinforcement for Floor Beams with Trapezoidal Web Openings. In *E3S Web of Conferences* (Vol. 497, p. 02013). EDP Sciences.

2. Esanovna D. B. Modern Teaching Aids and Technical Equipment in Modern Educational Institutions //International Journal of Innovative Analyses and Emerging Technology. – T. 2. – №. 6.

3. Daminova B. et al. Electronic textbook as a basis for innovative teaching //International Scientific and Practical Conference on Algorithms and Current Problems of Programming.-2023. – 2023.

4. Raximov N., Primqulov O., Daminova B. Basic concepts and stages of research development on artificial intelligence //2021 International Conference on Information Science and Communications Technologies (ICISCT). – IEEE, 2021. – C. 1-4.

5. Daminova B. Algorithm of education quality assessment system in secondary special education institution (on the example of guzor industrial technical college) //International Scientific and Practical Conference on Algorithms and Current Problems of Programming. – 2023.

6. Daminova B. FORMATION OF THE MANAGEMENT STRUCTURE OF EDUCATIONAL PROCESSES IN THE HIGHER EDUCATION SYSTEM //Science and innovation. – 2023. – T. 2. – №. A6. – C. 317-325.

7. Raximov N. et al. As a mechanism that achieves the goal of decision management //2021 International Conference on Information Science and Communications Technologies (ICISCT). – IEEE, 2021. – C. 1-4.

8. Daminova B. ACTIVATION OF COGNITIVE ACTIVITY AMONG STUDENTS IN TEACHING COMPUTER SCIENCE //CENTRAL ASIAN JOURNAL OF EDUCATION AND COMPUTER SCIENCES (CAJECS). – 2023. – T. 2. – №. 1. – C. 68-71.

9.   Daminova B. E., Oripova M. O. METHODS OF USING MODERN METHODS BY TEACHERS OF MATHEMATICS AND INFORMATION TECHNOLOGIES IN THE CLASSROOM //Экономика и социум. – 2024. – №. 2 (117)-1. – С. 256-261.

10.   Тошиев А. Э., Даминова Б. Э., Тошиев А. Э. ДБЭ Формирование самаркандской региональной транспортно-логистической системы //Перспективные информационные технологии (ПИТ 2017)[Электронный ресурс]: Междунар. науч.-техн. конф. – 2017. – С. 14-16.

11.   Даминова Б. Э. СОДЕРЖАНИЕ ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ И ТЕНДЕНЦИИ ЕГО ИЗМЕНЕНИЯ ПОД ВЛИЯНИЕМ НОВЫХ СОЦИАЛЬНО-ЭКОНОМИЧЕСКИХ УСЛОВИЙ //Yosh mutaxassislar. – 2023. – Т. 1. – №. 8. – С. 72-77.

12.   Даминова Б. Э. и др. ОБРАБОТКА ВИДЕОМАТЕРИАЛОВ ПРИ РАЗРАБОТКЕ ОБРАЗОВАТЕЛЬНЫХ РЕСУРСОВ //Экономика и социум. – 2024. – №. 2-2. – С. 117.

13.   Рахимов Н., Эсановна Б., Примкулов О. Ахборот тизимларида мантиқий хулосалаш самарадорлигини ошириш ёндашуви //International Scientific and Practical Conference on Algorithms and Current Problems of Programming. – 2023

14.   Student M. D. et al. THE ROLE OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES IN TEACHING LESSONS IN MATHEMATICS AND COMPUTER SCIENCE //Экономика и социум. – 2024. – №. 2-2 (117). – С. 88-93.

15.   Pant R. et al. Study of produced harmonics in DFIG powered by wind turbines over linear and nonlinear loads //E3S Web of Conferences. – EDP Sciences, 2024. – Т. 563. – С. 01006.