

THE ROLE OF ARTIFICIAL INTELLIGENCE AND MODERN INFORMATION TECHNOLOGIES IN THE LIFE OF SOCIETY AND PROSPECTS FOR THEIR DEVELOPMENT

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Abstract

This article analyzes the transformations that have occurred over the past decades in the field of artificial intelligence and modern information technologies, as well as their impact on education, healthcare, the economy and the social sphere. radicalization processes. The results of the study help to determine the importance of artificial intelligence in the development of society and ways to use it safely and effectively.

Keywords: Artificial intelligence, machine learning, neural networks, digital transformation, information technology, online platforms, security.

Introduction

The field of information technology has undergone tremendous changes over the past decades and has had an impact on all spheres of our lives. Artificial intelligence (AI) is seen as the foundation of the fourth industrial revolution. In developed countries, AI is widely used in education, healthcare, employment, social protection, and other areas.

Artificial intelligence is the ability of computer systems to perform functions inherent in the human mind, such as understanding language, solving problems, making decisions, translating, and others. AI brings together complex technologies such as neural networks, machine learning, natural language processing, and cognitive computing.

Body

Over the past decades, the field of information technology has undergone large-scale transformations that have completely changed our lives. Experts consider artificial intelligence as the basis of the fourth industrial revolution. In developed countries, AI is being actively implemented in education, healthcare, social protection and other areas.

Artificial Intelligence is a separate field of computer science that deals with the creation of computer systems capable of performing functions related to human thinking: understanding



language, learning, reasoning, problem solving, translation, etc. It combines such areas as neural networks, machine learning, natural language processing, cognitive computing, computer vision, etc.

Along with developed countries, modern technologies are also being actively introduced in Uzbekistan. In particular, on February 17, 2021, in accordance with the Digital Uzbekistan – 2030 Strategy, the Decree of the President of the Republic of Uzbekistan NoPQ-4996 "On measures to create conditions for the accelerated introduction of artificial intelligence technologies" was adopted. The program "Improving the position of the Republic of Uzbekistan in the Artificial Intelligence Readiness Index" was also approved.

Many people understand artificial intelligence as attracting robots to various fields. However, the concept of "artificial intelligence" does not mean the replacement of humans with robots. Its main goal is to empower a person. Therefore, AI is a valuable resource for businesses.

Previously, the term "artificial intelligence" was used to refer to tasks that can only be performed by humans, such as customer service or playing chess. Also, the in-depth study of computer technologies was perceived as AI. However, all this is only a small part of artificial intelligence technologies.

AI helps improve efficiency by automating tasks performed by humans. Today, its use has expanded significantly: according to analysts, AI can be used to analyze a person's character, students' abilities, employees' attitude to work, and much more.

According to the author of the book "The Next Lord of the World. Artificial Intelligence", AI is the ability to simulate human intellectual behavior using a computer.

Today, despite the great capabilities of AI, there are also serious problems. Scientists such as Stephen Hawking, Elon Musk, and hundreds of AI and robotics researchers are warning of the possible risks. The development of artificial intelligence is having a significant impact on robotics, and many countries have already begun testing robots with AI elements.

However, the question remains: how and to what extent should legal relations related to the activities of artificial intelligence and robots be regulated? The issue of their responsibility is also controversial.

As in all areas, artificial intelligence is also actively used in the field of propaganda. In the digital environment, AI is used to manage the distribution of information to users ("content management") and to filter information ("content moderation").

Modern digital propaganda has become so invisible that, as Cornell University professor Mor Naaman notes, "a person may not even realize that he is being exposed to certain propaganda." Today, AI is used on the Internet, social networks, smart gadgets, voice assistants (Siri, Alice, Google Assistant) and many everyday services. Young people, without noticing it, are constantly surrounded by artificial intelligence.

For a child who is looking for cartoons, AI recommends content similar to what they have previously watched. In social networks, AI sorts content depending on the user's interests. The Internet contains a wealth of information: more than 500 hours of video are uploaded to YouTube per minute, 9 million images are posted to Facebook per hour, and 500 million stories are posted daily on Instagram. AI helps the user find information that matches their preferences.



However, it's important to keep in mind that algorithms are created by humans, and they can also have specific goals. For example, most recommendations on social networks are advertising, not objective information. Studies have shown that false information spreads faster than true information.

Researcher Zeynep Tüfekci called YouTube an "engine of radicalization." According to her, the platform's recommendation system offers more and more radical and extreme content if the user starts watching materials on a certain topic.

YouTube is one of the most popular websites in the world. 70% of all views are based on algorithmic recommendations. Analysts note that for countries where English is not the main language, YouTube can be dangerous. A similar situation is observed at Facebook, where algorithms are better at processing only English-language content.

Conclusion

Artificial intelligence and modern information technologies play a crucial role in society. Their capabilities contribute to improving efficiency in the fields of education, health, economy and social life. At the same time, it is necessary to implement mechanisms to control the risks associated with artificial intelligence and ensure its safe use. transformation.

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