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ARTIFICIAL INTELLIGENCE. OPPORTUNITIES AND THREATS FOR THE FUTURE

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Анотація

У статті розглядаються перспективи штучного інтелекту, його можливості та основні загрози для майбутнього розвитку.

Ключові слова: *штучний інтелект, розпізнавання тексту, машинне навчання, урбанізація, соціальна стратифікація, система стеження за громадянами.*

Abstract

The article considers the prospects of artificial intelligence, its oportunities and main threats for the future development.

Keywords: *artificial intelligence, text recognition, machine learning, urbanization, social stratification, citizen tracking system.*

Introduction

In digital age the development of artificial intelligence is relevant and successful.

The term artificial intelligence (AI) arose in the 1950s and since then, it was attributed to a wide range of computer programs and algorithms. Game programs, various expert systems, chat bots, programs for text recognition were referred to AI.

Intelligence is a complex integral feature that allows you to adapt to new situations, learn to empirically comprehend, understand and apply abstract concepts. Modern AI systems don't corerespond to such a broad definition, but some elements are implemented by it. Today we can distinguish five main directions of development: universal algorithms of machine learning, work and autonomous machines, computer vision, speech recognition, virtual assistants. In all of these areas, they try to make AI analyze, systematise, and solve problems.

A significant disadvantage of human intelligence is that it is incapable of performing a large amount of computations in processes that are part of a certain interaction. Excessive amount of information can mislead a person in properly managing information and thus leading to ineffective decisions.

Research

Technology development transforms society. For example, such changes occurred when the era of agriculture came, which contributed to the growth of the agrarian economy, the development of permanent settlements, and then industrialization, which led to massive urbanization. The next stage was the industrial revolution that succeeded in scientific prosperity. Such a rapid development of technology leads to problems such as unemployment and social stratification.

The most acute problem associated with AI is unemployment. Some experts believe that automation will contribute to the emergence of a new era of universal welfare. People do not need to perform routine exhausting work and everyone will do what he likes. Automation will give you the opportunity to live equally. It will also provide an possibility to solve a number of problems and tasks that a person can not solve independently.

Furthermore scientists consider roboticism as a threat that leads to further stratification of society and an increase in the gap between post-industrialized countries and the rest of the world.

In addition to social fears, there are also existential threats from the use of developed AI systems. In particular, military researches and citizen tracking systems are of particular concern. Unfortunately, these fears are justified. Such systems already have the ability to track, listen to calls, analyze preferences in social networks (Facebook, Google, Twitter).

Another threat is the development of social, religious and moral problems, which entails a conflict between natural and artificial forms of thinking. Artificial intelligence has the ability to self-reproduction and may lose control of the person. Accordingly, it can be argued that artificial intelligence greatly simplifies human labor, therefore, its introduction into enterprises contributes to the workers development and activity efficiency.

Conclusion

Today we are witnessing the spread of novel AI technologies with surprising potential. AI is expected to help a person perform complex functions and not to completely replace people. The more progress is made in the field of AI technology, the more pressing a rational, far-sighted approach to the associated challenges becomes. The development of artificial intelligence can become both a positive and negative factor for humanity. We must realize the danger that it carries.

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