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Штучний інтелект. Вплив штучного інтелекту на наші життя

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Анотація: В статті йдеться про швидкий технічний розвиток, про поняття штучного інтелекту, приклади застосування ШІ в сучасному житті, його вплив на наші життя.

Ключові слова: Штучний інтелект (ШІ), асистент, технології, автоматизація процесів і завдань, пошукова система, машинне навчання.

Abstract: This article is about rapid technological development, the notion of artificial intelligence (AI), its usage in modern life, impact on our lives.

Keywords: Artificial intelligence (AI), assistant, technology, task automation, search engine, machine learning.

Recent decades have seen dramatically increasing pace in the development and adoption of new technologies, even though there are many issues with perception of new unknown technologies in different parts of the world, especially it is widespread in countries which are the least developed. This rapid technological change is affecting every single area of the economy, society, culture and our daily lives [1].

Artificial intelligence (AI) is the simulation of human intelligence processes by computer systems, which can be implemented through neural networks. Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision. They are capable of gaining, processing and applying of acquired data and skills.

It's captivating how AI has become involved in our existence and we encounter it in our daily lives numerous of times without realizing it.

From voice-controlled personal digital assistants, aiding in avoiding traffic, offering movies or music recommendations, the well-liked self-driving cars and vehicles, instant translation of machines and various other power-packed predictive capabilities are just some applications of the forms Artificial Intelligence has taken up today. There are lots of other instances of AI being leveraged in our everyday lives [2].

Here are some examples of artificial intelligence that you probably come across regularly but aren't even aware of their AI aspect: social media, music and media streaming services, search engines, navigation apps, banking, smart devices, chatbots, healthcare, security and surveillance, smart personal assistants [3].

We are done seeing this technology play out brilliantly in sci-fi movies. We're now seeing it manifesting in our lives every day, and it has brought about a lot of possibilities. Artificial intelligence can dramatically improve the efficiencies of our workplaces and can augment the work humans can do. When AI takes over repetitive or dangerous tasks, it frees up the human workforce to do work they are better equipped for tasks that involve creativity and empathy among others. If people are doing work that is more engaging for them, it could increase happiness and job satisfaction. Here are some of the leading roles that artificial intelligence is playing in our lives [4].

1. Task automation

The advances in AI since the rise of deep learning can usher a new age of automation as machines go beyond human capabilities in a wide range of tasks.

The jobs that can be mostly automated include:

- predictable physical labor
- white-collar back-office work: data collection and processing

- dangerous or risky work

Machines can now perform the activities involved in these jobs better/cheaper than humans. These activities include tasks that involve manipulating tools, extracting data from documents and other semi-structured data sources, making tacit judgments and even sensing emotions. In the next decade, driving is likely to become automated as well, enabling one of the most common professions to be automated.

Cannot fail to mention countless digital assistants developed by huge companies. Among them there are Google Now, Microsoft's Cortana, Apple's Siri, Amazon's Alexa. These assistants are meant to help users conduct various tasks, such as searching for information on the web, requesting other apps, checking timetables and schedules. In addition, AI is used to help you through driving and parking your car. Such cars use deep learning to scan and recognize the space around a vehicle. Technology companies like Tesla use AI to give cars "the ability to see, think, and learn, so they can navigate almost infinite range of possible driving scenarios". The company's AI-powered technology is already in use in cars made by Mercedes-Benz, Volvo, Audi, Toyota and Tesla, and is sure to revolutionize how people drive and enable vehicles to drive themselves.

2. Personalized shopping experiences

Online marketplaces use an internal recommendation system to help boost on-site sales. Amazon, for instance, uses machine learning to match customers "with other shoppers who had similar purchase histories, and those purchase histories would suggest recommendations for the visitor."

3. Social media

Social media platforms use AI to surface content they believe viewers would be most interested in based on their preferences and search history. Creators, small and midsize businesses rely on AI technologies within these platforms to connect with their followers. Content automation tools also support creators with suggested design templates, creating content that aligns with their brand aesthetic.

A great instance would be Gmail, which used AI to implement filters and smart replies. You can easily respond to someone's email with a single phrase provided by Gmail, without typing anything yourself. Or for the convenience sake organize all your mail into some categories like: primary, forums or spam etc. I have nearly overlooked to mention Google's algorithms which are able to predict relevant searches or make recommendations based on your searching history. Google search engines use neural networks which make possible to collect data about users like cookies, location, age, searching preferences and so forth.

4. Job searches

LinkedIn, similar to other social media platforms, uses AI to surface content most relevant to its users, suggest connections and serve relevant ads. It also uses AI to group similar positions that might have different titles, identifies the skills that the job requires, then suggests the job to a LinkedIn member with relevant experience [5].

Machine Learning models can be trained to function better with the abundance of actual data from users, thus enhancing Artificial Intelligence. The aforementioned are a few of the greatest examples of AI in everyday life that are ubiquitous and simplify the vast majority of our daily lives. This is proof enough that AI is indeed transforming our lives by allowing us to be more productive to focus on real challenges [3].

Consequently, Artificial Intelligence makes our lives way more efficient and convenient, as it helps to perform everyday tasks. Scientists and experts predict that the worldwide use of AI will lead to a second industrial revolution. AI has already made a big impact on many aspects of our lives. The more improvements and advancements are made to AI technology, the more widespread it will become in daily life.

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