

CHATGPT: NEW OPPORTUNITIES OR DANGER FOR HUMANITY?

Yavarchuk H.V.

Belarusian State University of Informatics and Radioelectronics, Minsk, Republic of Belarus

Lauretskaya L.A. - lecturer of the Department of Foreign Languages

Annotation. When the computing abilities of machines developed to the human level, the term "artificial intelligence" was born. In 2015, a startup called OpenAI was organized. One of its designs is ChatGPT, an artificial intelligence-based chat bot.

Keywords: Artificial Intelligence, neural network, bot, antiplagiarism, deepfake.

Introduction. What is artificial intelligence? In the middle of the 20th century, when the first computers appeared, the computing abilities of machines began to approach the human ones. In their turn, scientists had a question: are there limits to the capabilities of computers? That's when the term "artificial intelligence" was born.

There are many definitions for AI, but they all come to one thing: AI is an artificially created system that is able to simulate intellectual and creative human activity. Moreover, intellectual activity is not just mathematical calculations, it is an activity aimed at creating intangible things in the field of science, art, literature, as well as in other creative fields: learning, decision-making, conclusions and many others.

Over the past five years, interest in the region has tripled, and the number of startups has grown by 113% only in the period from 2015 to 2018 (Figure 1).

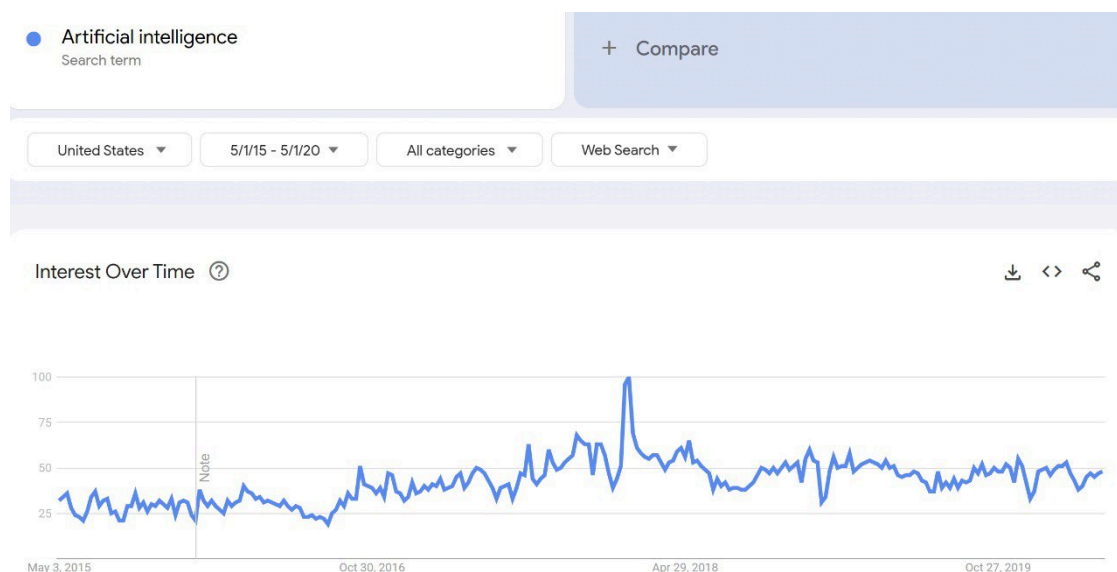


Figure 1 - Term search frequency graph

Main part. At the end of 2015, Elon Musk and 5 other investors organized a startup called OpenAI, the main necessity idea of which was to increase control over the development and creation of AI. The founders spoke of OpenAI as an open company working for the benefit of society, not the state or a corporation. The company planned to openly cooperate with all individuals and institutions, and to publish all the results of its research.

They also created a DALL-E neural network, capable of drawing pictures based on a text description. This is possible due to the training of a special natural language processing algorithm called GPT-3. This is the third version, which uses a database of 500 GB of text in data and 175 billion different parameters. For comparison, the second version, presented a year earlier, uses a database of 40 GB of text in data and 1.5 billion different parameters (Figure 2).

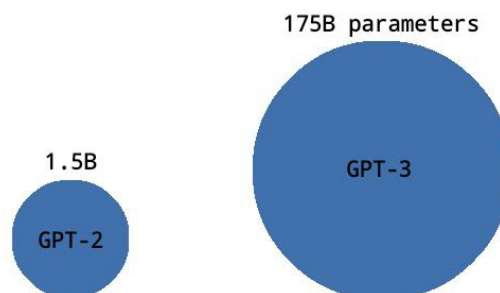


Figure 2 - Evolution of GPT-2 and GPT-3

Such a number of parameters allows it to do unique things, for example, to figure out the meaning of what it has read, to write more structured texts or, for example, poems. In 2022, ChatGPT was launched, a customized neural network based on GPT-3, with an emphasis on conversational abilities to simulate a dialogue with a person. In 5 days, approximately a million people have tried that bot.

It is important to understand that ChatGPT and GPT are distinct things. One of the main differences between them is the level of customization, how much human can change it for itself. GPT-3 can be programmed for just countless different tasks, ChatGPT is one of those tasks. GPT-3 can be configured to sound different: as poet, as representative of any subculture, even as ChatGPT.

By all means there are both positive and negative aspects to everything.

ChatGPT knows a lot: the Constitution of Argentina, how to pay taxes in Poland, it can write poems, articles, even working codes. It passed the MBA entrance test and the medical license exam in the USA. Also, the GPT-3 language model has just recently been updated to GPT-3.5, thanks to this update, for example, one can throw in a paragraph of text and the bot will analyze it, the bot will also be able to answer questions about this text or make some deep opinion.

However, everything has its disadvantages.

Developed with the help of many versatile people, it began to adopt bad qualities. To solve this problem, according to Time, developers used Kenyan workers who earned less than \$2 per hour. Which means that these Kenyan workers had to work with all the "dirt" of the Internet.

The bot doesn't know the real answers. The developers openly warn that the bot is capable of generating inaccurate information, whatever it writes, you still need to check it. This problem is solved by creating a new autonomous AI that will test AI.

According to an article by Stanford University, a large number of students have already used ChatGPT in their final exams.

Also, the bot may not be used for the most positive purposes. Just recently, there was a viral video about how the deepfake (an image where a person's face is not real, but created or altered by artificial intelligence) of an American comedian, advertised testosterone in TikTok. Imagine what will happen when everyone can generate a heartwarming text in ChatGPT, generate someone's voice, which is already possible, and use it for not very good purposes.

Conclusion. It is up to each person to decide for themselves whether this is good or bad, but in any case, such rapid development is impressive, although it gives some concerns. Moreover, this is just the beginning of the path of neural networks.

References

1. *OpenAI Used Kenyan Workers on Less Than \$2 Per Hour to Make ChatGPT Less Toxic.* / Billy Perrigo //Time. [Electronic resource]. – 2023. – Mode of access: <https://time.com/6247678/openai-chatgpt-kenya-workers/>. – Date of access: 15.03.2023.
2. *Scores of Stanford students used ChatGPT on final exams, survey suggests.* / Mark Allen Cu and Sebastian Hochman. // The Stanford Daily. [Electronic resource]. – 2023. – Mode of access: <https://stanforddaily.com/2023/01/22/scores-of-stanford-students-used-chatgpt-on-final-exams-survey-suggests/>. – Date of access: 15.03.2023.