

PROSPECTS OF ARTIFICIAL INTELLIGENCE

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Artificial intelligence is a highly developed form of technology with yet unknown capabilities. And if 10 years ago the rapid development of artificial intelligence was only in the forecasts, today it is already a reality.

The term “artificial intelligence” was first coined at a conference in Dartmouth (USA) in 1956.

Today, Ukraine has no legal definition of the term AI. The only regulatory document on AI regulation is the Concept of Artificial Intelligence Development in Ukraine.

We have the opportunity to observe the development of AI in the world. The current stage of AI development is based on the concept of open models. The advantage of open models over traditional ones is their flexibility, dynamism, and quick adaptation to any conditions and programs.

Our society relies on expanding the capabilities of machines and gradually replacing human resources with technology. Therefore, the ultimate goal of many tech giants is to create artificial general intelligence (AGI).

AGI promises to revolutionize many industries, from medicine to space exploration. New inventions will allow solving complex problems, optimize the consumption of material, labor, and time resources, and improve the quality of life of

mankind. At the same time, American billionaire and businessman Elon Musk believes that AI can lead to the “destruction of civilization” (2023).

“The Big Nine (three Chinese companies – Baidu, Alibaba, Tencent – and six American companies - Google, Microsoft, Amazon, Facebook, IBM, Apple) are at the forefront of this race.

Currently, there is an ongoing debate about the dangers that the development of AI may pose.

A report commissioned by the U.S. Department of State from Gladstone AI claims that “the development of advanced AI and AGI has the potential to destabilize global security in a way reminiscent of the emergence of nuclear weapons” (TIME, March 11, 2024).

Bill Gates believes that AI will bring positive changes – whether in medicine, education, or climate change (Bill Gates, March 21, 2023).

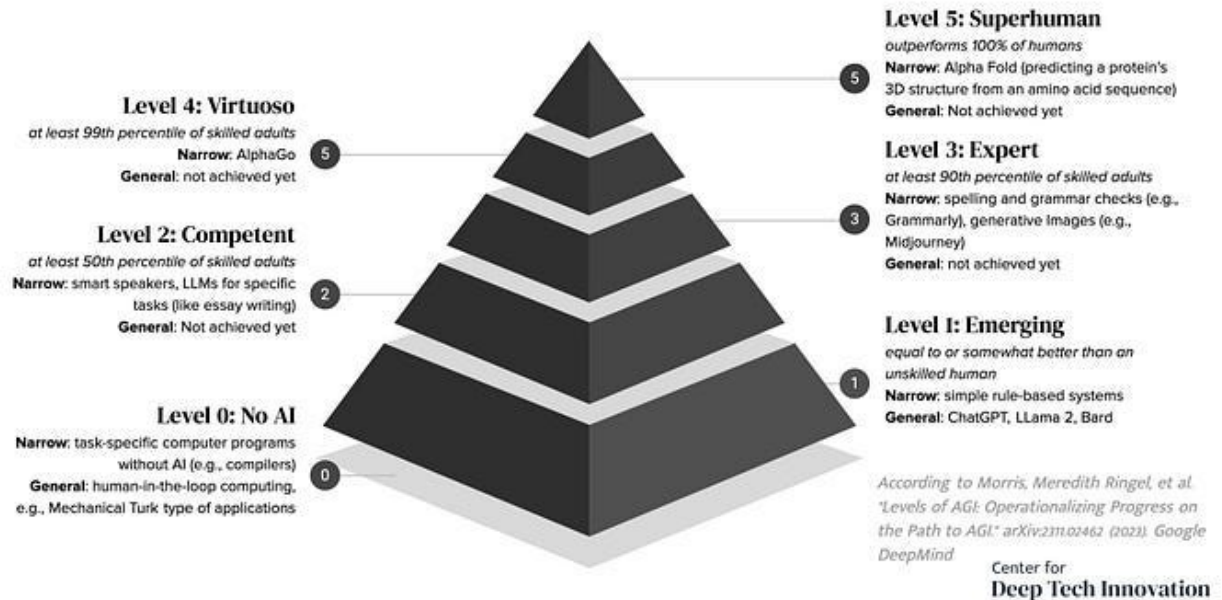
However, there are risks:

1. AI doesn't always understand the context of a human query well, and the information received is not correct.
2. For certain reasons, AIs give incorrect answers to math problems.
3. AI can be used not only for good purposes but also for malicious ones.
4. There is a possibility that AI will get out of human control (Bill Gates, March 21, 2023).

The world's first regulatory act on AI is the European Union law (entered into force on August 01, 2024). It will regulate the operation of AI in the EU. The law contains strict rules for AI operation to eliminate any global dangers associated with this area.

Google DeepMind researchers have developed a 6-level structure for the clear classification of AGI:

Different Levels of AI according to Capabilities



Level 0 No AI (calculator software)

Level 1 Emerging - equal to or somewhat better than an unskilled human (ChatGPT)

Level 2 Competent - at least 50% of skilled adult abilities (specific tasks - essay writing)

Level 3 Expert - at least 90% of skilled adult abilities (spelling and grammar checking)

Level 4 Virtuoso - at least 99% of skilled adult abilities (logic games)

Level 5 Superhuman - outperforms 100% of humans

Today, AI is already widely used in everyday life:

- chatbots;
- medical software based on AI (eXtra Vision application used at the Romodanov Institute of Neurosurgery in Kyiv; dental procedures performed by a robot controlled by artificial intelligence);
- creation of artistic, musical, literary works;
- a robot taxi without a steering wheel and pedals, which will work on the basis of AI (Tesla);

- The Ministry of Economy of Ukraine signed a partnership agreement with the American company Palantir Technologies, which will use artificial intelligence to help demine Ukraine;

- The Ministry of Foreign Affairs of Ukraine has created a digital personality using AI technologies to provide official consultations for the media.

Investments in AI development are growing rapidly. Artificial intelligence can optimize business processes, eliminate some professions and promote the development of others, but it cannot change us, because technology is in the hands of people, not vice versa. So, don't expect revolutionary changes from AI. Revolutionary changes are made by people, and not always for the better.

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