
AI boom and AI effect

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1 AI boom

The AI boom has begun in the late 2010s and gained worldwide attention in March of 2016 when a computer program AlphaGo developed by Deepmind beat a 9-dan professional in the game Go. Technologies such as alphafold revolutionized the process of drug development due to more accurate predictions in protein-folding. Interestingly, AI could predict the shape of the proteins accurately to the width of an atom. By 2022, LLMs(Large Language Models) were capable of producing text to image models that could generate images using a text prompt. The generative AI race began in 2016 which followed the advances made in GPUs. The market capitalization of NVidia, a company whose GPUs are in high demand to train and use generative AI models, rose to over US\$ 3.3 Trillion. GPT-3 is an LLM released in 2020 by OpenAI which is capable of generating human-like text. Its upgraded version GPT-3.5 could produce articulate answers of very high quality and performed well on college entrance exams like SAT. Big-Tech viewed AI as a threat to various search engines. Across various industries, AI tools are being abundant and are proven to cause incremental change in their efficiency and caused positive influence on their revenue. There are concerns that AI could threaten job security in the future, due to the increased availability and affordability of AI powered machines. It can also increase the speed and stealth of cyberattacks. AI also has the ability to generate convincing messages which can facilitate large-scale propaganda or misinformation. Ultimately, the benefits of AI outweigh its risks.

2 AI effect

According to Stottler Henke, "The great practical benefits of AI applications go largely unnoticed by many despite the already widespread use of AI techniques in software. This is the AI effect. This effect led AI advancements to be dismissed as mere computations and not "real intelligence". AI applications have been integrated into many mainstream tasks, often not being given recognition. Once something becomes achievable by AI, the human perception of AI shifts to include what cannot be done at that point, it is an example of moving the goalposts. For example, when IBM's DeepBlue defeated the reigning World Champion in chess(Garry Kasparov), people criticized the invention saying it is just a brute-force machine which did not have a deep understanding of the game. Whenever a machine does something intelligent, it ceases to be regarded as intelligent. It is suggested that humans subconsciously preserve a special place for them in the universe. By discounting the prowess of AI, they continue to feel special. Some experts think that the AI effect might continue, with advances in AI continually changing the public expectations.

3 References

https://en.wikipedia.org/wiki/AI_boom
https://en.wikipedia.org/wiki/AI_effect