

Artificial intelligence: A Man Made Superpower

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Introduction

The world is on the cusp of significant technological and digital evolution. AI or artificial intelligence has managed to integrate itself into a human being's lives in subtle ways, making life easy and convenient and diminishing the notional boundaries between reality and modern-day technology. Artificial intelligence is a smart computer which can mimic human intellect; AI can also reason, discover meaning and learn from past data [1]. AI is the concept of developing computer systems that can execute functions that would require human intellect, some of these tasks could include cognitive problems that involve planning, reasoning and learning, but also perceptual tasks like recognizing speech [2]. The earliest research of AI started in 1930 when Alan Turing published a book Computing machinery and intelligence, the book had an intriguing question “can machines think?”. John McCarthy from Dartmouth College in Hanover was first to coin the term AI [3]. This puts forth the question of whether AI will become too powerful and take over the world? The purpose of this paper is to persuade that AI is not a threat to humanity and would instead work towards the development of humanity. A contradiction to what is commonly stated, an AI takeover is highly unlikely; AI will benefit the job, healthcare and economy sectors.

Jobs in the era of Artificial Intelligence

AI will not create unemployment; instead, AI will create more job opportunities and employment. Firstly, AI does not always work and requires human intervention from time to time. According to a report by Accenture, man-machine hybrid teams (AI-human collaboration) will boost employment by 10% in 2021. Artificial intelligence is good at perceptual tasks, analytical tasks, decision making, and planning. In contrast, humans are good at tasks which

require creativity, common sense and cognition. Failures in AI systems will require human intervention to correct them. For example, a real estate tycoon from Hong Kong was losing up to \$20 million daily after he used an AI automated supercomputer called "K1" to manage his investments [4] showing the necessity of human intervention in cases like this. Moving on to another case, on sixth May 2010, a flash crash started as the Dow Jones Industrial Average fell more than 1,000 points, leading the company to a loss of equity worth one trillion dollars. The cause of the flash crash was an algorithm typing erroneous order. Trading has become heavily computerized, human intervention in such tasks is essential to identify errors and glitches and prevent such flash crashes [5]. The last example comes from soccer, where an AI-based software camera followed the referee's bald head instead of football [6]. The advancement of AI has led to different organizations integrating these systems into their workflow, hence leading to a rise in demand for AI developers and engineers for system maintenance.

Secondly, as AI develops and becomes better, banks and financial sectors need to implement AI systems to identify and mitigate fraud. Therefore, increasing employment as more engineers will be required to develop these systems and maintain them. For example, a group of criminals used AI software to impersonate the boss and demand a fraudulent transfer of 200,000 euros, [7]. To prevent such frauds from taking place, organizations and banks will implement an AI defrauding system, which will alert the organization of any malicious activities taking place. However, AI might takeaway and replace some jobs and tasks that are unskilled and repetitive. Primarily, AI is good at tasks that are monotonous and repetitive. For example, jobs such as truck driving is at a higher risk as AI-powered self-driving trucks will be implemented [8]. Volvo announced the new automated "Future truck 2025" which ensures more safety and 70% fuel efficiency [9].

Nevertheless, human intervention is required where AI fails. To illustrate the situation of autonomous cars, there can be situations where the AI system fails and can lead to severe casualties [10]. Tesla is a pioneer in autonomous self-driving cars, which only guarantees 40% safety [11]. AI also works on data which would fail in non-favourable conditions; therefore, humans are needed in such situations. AI may take away jobs; however, even monotonous jobs will require human intervention and supervision. Even tasks like truck driving can have failures and need human mediation in unfavourable situations.

Healthier humans with AI

Artificial intelligence will make humans become healthier and live longer. AI is good at big data analysis; hence AI can find an appropriate cure for patients. AI uses a decision-support system that takes a decision based on past data and analysis of trends. There are already some tools that are in existence that is helping doctors make their diagnosis more precise and find an appropriate cure. For example, IBM Watson Health is an expert system that has a collection of data which is analyzed by an AI system to predict a cure for specific situations [12], [13]. Moreover, to further substantiate the use of AI in healthcare, Cincinnati Children's Hospital Medical centre implemented an AI system that reads a clinical note of various patients to decide if they are fit for clinical trials. This process was very time consuming as the nurse would have to read the clinical notes [14]. Lastly, AI will enable doctors to make better radiology tools that are accurate and illustrate a detailed image which could eliminate the need for taking samples of tissues in biopsy [15]. As AI is good with data analysis, it can provide with early warnings for different health conditions.

Secondly, surgical robots and using AI-powered smart medical devices would make it easy to conduct surgeries and monitor vitals in critical situations. Monitoring a patient's vitals is essential in ICUs. Using smart AI systems will enable doctors to predict if the condition of the patient is deteriorating. There are many non-communicable diseases like type 2 diabetes and hypertension, which are hard to detect, but AI systems will make it easy for doctors to detect such cases. For example, AI is being used for the imaging of the diabetic foot condition, ultimately improving morbidity and mortality [16]. In addition, Surgical robots enable doctors and healthcare workers in assisting surgeries, disinfecting rooms and dispensing medication [17]. Da Vinci Surgical System is one of the most profound surgical system used by doctors and healthcare workers. The advantage of using this surgical robot is that it can bend and rotate at greater capacity than the average human hand [18]. By using AI-powered smart tools it will give clinicians an upper hand to be aware of nuances, AI will usher in a new era of clinical quality and exciting break thoughts in patient care.

Boost to Economy

AI will help in boosting the world economy, benefiting humans. Firstly, AI and innovative technologies will enable a more efficient workforce. Some reports suggest that the 12 developed economies that cumulatively generate 0.5 % of the world economy would double by the year 2035 by the use of AI. For example, a study by PricewaterhouseCoopers says that the global GDP will increase by up to 14% by 2030 [19], proving to be possible because of the productivity gains. Productivity will also improve due to businesses complementing and assisting their existing workforce with AI technologies. In support, another report by the McKinsey Global Institute suggests that artificial intelligence will incrementally add 16% or around \$13 trillion by

2030 to current global economic output [20]. AI will boost the economy, which will benefit countries, economies and governments. This will be possible by increasing productivity.

Furthermore, AI can create a virtual workforce which can self learn and solve problems. This feature of AI will help economies make a better decision, ultimately increasing and boosting the economy. For example, Mckinsey global institute says there will be an explosion of data by 2025 of 163 zettabytes which would allow AI systems to self learn situations and work efficiently [21]. AI will increase economic growth by data analysis and self-learning cognitive processes helping the world economy. As AI has some of the most amazing features like the Internet of things, big data analysis, and smart crypto currency, AI will play a key role in consumer demand. In support AI can self learn to solve problems and analyze big amount of data which will result in better cheaper and faster research and development. Therefore, the consumer demands will increase directly impacting the economy.

Conclusion

Artificial intelligence does not pose a threat to humanity; instead, AI will help them in many different fields. One of the most significant threats that AI posed was to take away jobs; however, as explained above, AI will create millions of more jobs than take them away. New technology is not a new phenomenon, technological advancement has been continuous for over 250 years, but US unemployment has stayed between 5 to 10 per cent [22]. AI is going to make it possible to live longer, healthier lives. The reason being that AI will not dominate the world, instead, be dominated by humans and become our servant. Humans will use the power of AI to analyze, assess and evaluate big data about human interest like health, environment and lifestyle.

Doctors will be able to make better diagnoses and recommend more effective treatments. Lastly, AI will help the economy grow. AI-related gains are likely to focus on productivity, efficiency, automation and costs, enabling consumers and businesses to capitalize on the digital economy. AI is often portrayed as a villain, however AI will make humanity a better kind of itself.

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