Artificial Intelligence - promises and perils

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Artificial Intelligence - its promise and perils

Essay

Artificial intelligence has become an increasingly important part of the modern world. Artfical intelligence is what is the stimulation of human intelligence onto machines. In this boom of technological revolution, the world is left to wonder if natural intelligence matters anymore. Artfical intelligence is misunderstood and misinterpreted as something powerful and dangerous. However, artfical intelligence has tremendous transformational potential. If harnessed properly it can transform the dynamics of the global world. Artfical intelligence can bring new changes to the society and the way the work is done. It can process vast amounts of data and perform complex tasks, which have led to its use in

numerous areas of daily life activities such as healthcare, education, finance and transportation. It often offers significant benefits while also brings up a range of ethical, social and economic issues that needs to be addressed. Its implications includes unemployment, Cybersecurity issues and potential for misuse. It is essential to consider ethical and social implications, and develop polices that ensure its responsible use. By doing so, the, benefit of artificial intelligence can be harnessed while its potential risks can be mitigated. It will ultimately create a more equitable, just and sustainable future for all.

This essay will explore the promise and perils the artificial intelligence poses. It will also shed some light upon the practical solutions to address the perils of artificial intelligence.

Artificial intelligence (AI) is a subfield of computer science that focuses on designing and developing intelligent agents. These are

Systems with the ability to reason, plan and learn. Artificial intelligence can be divided into two broad call categories: narrow AI and general AI. Narrow AI or weak AI is designed to perform specific tasks such as playing chess or analyzing medical images. This type of AI has already been used to transform many industries by automating tedious and repetitive tasks, thus freeing up human resources for more creative endeavours.

Likewise, General AI is a hypothetical system that could perform any intellectual task that humans can do. Research into this type of artificial intelligence continues in the hopes of realizing its potential to revolutionize lives. In Computer vision, machine learning algorithms can be used to analyze images and videos. This had led to breakthroughs in fields such as facial recognition, object detection and autonomous vehicles.

Birth of artfical intelligence dates back to 1950. Alan Turing published "Computer Machinery and Intelligence" which proposed a test of machine intelligence called "The Imitation Game." In 1952, a computer scientist named Arthur Samuel developed a program to play checkers, which is the first to ever learn the game independently. However, John McCarthy is considered the father of AI. John McCarthy was an American computer scientist. The term artificial intelligence was coined by him. He is one of the founder of artfical intelligence together with Allan Turing.

Artfical intelligence promises considerable economic and social benefits in the fields of medicine, exploration and space research, military, industry and economics. The following paragraphs will shed some light upon the promises artfical intelligence can passes.

To begin with artifical intelligence possess huge potential to transform mundane tasks. These type of tasks has the capacity to be ~~Correctpted~~ mistakenly done by human error. Slight human error can transform the results of the tasks. For instance, robotic surgery could offer tremendous potential to erase human error and can do surgery without the indvement of human error. Thus, artificial intelligence promises reduction of human error in tedious tasks.

Moreover, fully automated production line in manufacturing facility and even in hazardous environment has the potential to eliminate risks. It would be a risk free job that can transform the entire manufacturing industry. For example, in Japan fully automated production is already working by the use of artificial intelligence. Hence, artificial intelligence has the capacity to override human labour involved in manufacturing even in dangerous environment.

Furthermore, artificial intelligence can provide assistance to customers by being available 24 hours of the day and 7 days of the week. The advantages involved with the availability of AI tools can increase business profits by addressing the concerns of customers timely. Human beings has the potential to take rest, eat and perform leisure activities. However, AI enabled tools can be accessible for whole day and night. This is how AI promise increased customer satisfication and thus maximizing profits.

Likewise, Artificial Intelligence can promote new inventions. Detection of diseases, Cameras and sensors to navigate roads and traffic without human intervention. This it would help in revolutionizing the entire world. AI based algorithms can analyze disease and drive cars without human involvent. This would make more reliable outcomes for the entire humanity. So, AI has the potential to transform the entire world by promoting new inventions.

Additionally, Artificial intelligence has huge medical applications. from diagnosing treatment, to helping doctors and researchers to analyze data and develop personalized treatment. It will create a world where everything would be click away. Medical treatment would be accurate and error free. This will enhance human ~~eg~~ society that would be more reliable and stable. This is how AI would revolutionize medical field.

· Having discussed, the promises of artificial intelligence, it is also important to highlight the perils associated with artifical intelligence such as massive joblessness, high cost and maintainance and ethical concerns of AI. The following paragraphs will discuss these in detail.

Artificial intelligence offers perils that can affect the society in general this includes joblessness at a massive scale. Induction of artificial intelligence enabled automation may lead to the labour intensive jobs. Machines algorithms can perform tasks that were done by labours

This can result in unemployment. As per world Economic Forum report artificial intelligence induced jobs can replace around 22 million labour intensive jobs in future. Thus, AI has the potential to ~~procede~~ replace humans in automated jobs.

Moreover, artificial intelligence systems require high cost of implementation and maintainance. Implementation of AI systems need significant upfront investment in infrastructure, data collection and model development. Additionally, maintaining and updating AI systems can be costly. Thus, AI systems require high cost and maintainance.

Furthermore, it is crucial to prioritize the ethical concerns of AI systems. This ~~ensure~~ includes addressing biases, ensuring privacy and data protection and establishing clear regulations and guidelines. Without human involvement AI systems can cause unethical harm. As these algorithms would not understand the values and ethical principals. This can cause the humanity to lose its ethical values. Thus, checks on AI systems is imperative.

Additionally, Cyber Security attacks and exploitation make AI systems vulnerable. Malicious actors can manipulate AI algorithms of use AI-powered tools for nefarious purposes, posing security threats. For example, interference of Russia in US elections in 2016 is an example of Cyber Security attacks. This has eroded trust of the American voters in democracy. This is how AI systems are vulnerable to Cyber Security attacks.

Likewise, blindly relying on AI without proper human oversight or critical evaluation can lead to over dependence on AI. Errors on incorrect decisions, particularly if the AI system encounters unfamiliar or unexpected situations can cause difficulty for humans. Reasoning behind the AI based decisions or predictions is extremely crucial for humans to understand and does not follow AI Systems blindly.

Now the question arises: Are there any solutions to tackle with the perils posed by artificial intelligence? Yes there are a number of solutions such as ethical and responsible AI, continued research and innovation

human AI collaboration are some solutions which will be discussed in the following paragraphs.

Firstly, it is very important to address the ethical concerns of AI systems. Development and deployment of AI systems that are ethical, transparent and accountable. Algorithms based on ethical considerations could minimize the risks associated with it. Without proper regulation AI systems could exacerbate societal and economic issues. Hence, responsible and ethical AI systems are need of the time.

Secondly, Continued research and development in AI is very significant to enhance its capacity further. Investments in fundamental research such as developing new algorithms and models can lead to breakthroughs and improved performance. Promotion of data sharing and open accessibility can foster collaboration accelerate progress across different domains. Technology transfer has always helped humanity. So technology transfer to further improve the capability of AI systems can yield greater benefits for all.

Thirdly, AI should be designed to augment human capabilities rather than replacing them entirely. Emphasizing human-AI collaboration can lead to more effective solutions and enhance productivity in various industries. For example, user centered design and interfaces that facilitate seamless interaction with AI systems are important considerations.

Forthly, preparing the workforce for an AI-driven future is crucial. Initiatives focused on AI education and upskilling programs can help individuals acquire the necessary skills to thrive in a changing job market. For instance, encouraging interdisciplinary collaboration and fostering partnerships between academia, industry and government can further support these efforts.

To conclude, AI has all the ability to surpass human intelligence and can perform any particular task much accurately and efficiently. There

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is also no denying the fact that AI possesses immense potential which further helps to create a better place to live in. However, anything in excess is not good and nothing can be matched at par with the human brain. Therefore, AI should not be used excessively as too much automation and dependence on machines can create very hazardous environment for the present human mankind and for the next generations.