

Artificial Intelligence is not all evil - It can Promote Social Good, too.

## Outline

### 1. Introduction

a). Define Artificial intelligence.

b). Thesis statement; Despite apprehensions about its potential dangers, artificial intelligence is not inherently evil; rather, it possesses immense potential for social good, revolutionizing healthcare, education, sustainability, and various other sectors, ultimately contributing to the betterment of society.

2. How has AI modernized today's world?

3. Is it a threat to the survival of human race?

4. Artificial Intelligence as a tool for human development:

1. Upgrading the field of medicine

a) Improving diagnostic imaging

b) Promoting personalized health monitoring

## 2. Augmenting economy

- a) Increasing labour Productivity
- b) Making inestimable calculation ✓

## 3. Increasing national security

- a) Promoting critical cyber networks
- b) Ameliorating defence strategies

## 4. Reducing the impacts of climate change

- a) Helping the detection of deforestation using satellite imagery

- b) Monitoring coal Plant hazardous emissions during energy Production

## 5. Increasing the yield of agriculture Products

- a) Using agriculture robots

- b) Exploiting crop and soil monitoring

## 6. Transforming the transportation industry

- a) Self driving vehicles

- b) Traffic management

## 5. Drawbacks of artificial intelligence:

### 1. Invading human Privacy

- a) Social media algorithms have

- b) substantial control over people's

engagement

## 2. Leading to unemployment

Replacing manual work with machines

## 3. Overpowering human beings

Making it impossible for humans to control machine damage.

## 4. Accelerating hacking and terrorism

Introducing robotic swarm to attack remotely

## 6. Changing Perspective of decision making

## 7. Conclusion

## The Essay

"Artificial intelligence is here, today. It's not about to happen, it's happening." by Tim O'Reilly. It binds itself cast as either a harbinger of dystopian nightmares or a beacon of technological utopia. However, such polarizing narratives fail to capture the nuanced reality of AI's impact on society. Artificial intelligence has long gone from delusion to necessity in today's world. It has been the most progressive development in the last few decades, <sup>in Pakistan</sup> intruding into every human field. Although AI is not a futuristic vision, it underpins present day life in several disciplines, including health, finance, national security, environment, climate, Transport, and agriculture. Its use is equally significant in augmenting the economy, and increasing yield output. However, despite its splendid

rewards in every walk of life, AI has become a controversial arena on account of the threats it poses to human beings. Apprehensively, the predominant perturbation is that a machine would not to be smarter than humans, or it would pose a critical risk. For instance, in the case of social media, the algorithms have substantial control over what people choose to engage with, thus invading the privacy of its users and exploiting their information. Another biggest fear is the idea that AI is going to overrule the human world. In other words, AI would eventually replace human beings because of its overpowering nature, competing with comparatively weaker human capabilities, thus, increasing unemployment and laziness. Hence, despite valid concerns, the effects of AI on the world are undeniable, and it keeps developing every day. However, precautions severe

steps must need to be taken to use the positive aspects of the invention to create a better world.

Like any other proceeding discoveries of mankind, artificial intelligence comes with its uses and misuses.

A lot has been talked about the loss of lower and even mid-level jobs due to artificial intelligence.

A machine that can think and perform tasks like a human is often blamed to push unemployment. As social scientists often claim this will only act as a tool for crony capitalists to further fuel the inequality in the nation. There can be many such negatives in this humans verses machines debate but the very foundation of our human intelligence asks us to look for positives. All the efforts and hardwork put by engineers and scientists to develop machine learning and artificial intelligence

were to improve the quality of human life further. Artificial intelligence were to improve the quality of human life further. Artificial intelligence can be leveraged to provide basic services in regions where human interactions aren't sufficient.

To begin with its merits, artificial intelligence has revolutionized the field of medicine. It has been beneficial not only in diagnostic but also in therapeutic treatment.

For instance, through very accurate diagnostic scans like mammography, computed tomography, echocardiography, etc. AI helps predict if a patient is susceptible to breast cancer, brain injury, or stroke. Moreover, machine learning enables individuals to monitor their health through personalized medicine devices such as smartwatches, android phones, walking bands, etc. The more personalized data the devices' algorithms

are fed with, the more accurate they can understand a user's Profile enabling health care to spot potential anomalies on time. The electronic health record, in fact, is an electronic version of a Patient's medical history that may include all the keys demo. graphics, Progress notes, Problems, and Past medical history. Briefly, AI has transformed the same approach toward the medical field.

Furthermore, AI Plays the role of diesel to drive the economy worldwide. Rapidly advancing computing capability with accuracy has made it attainable to assemble, calculate, and transfer large volumes of data in no time. Moreover, AI has also increased labour Productivity and a virtual workforce capable of solving Problems and self-learning. In a Journal Published by European Parliament, Accenture forecasts that AI could double economic growth rates by 2023



by increasing labour productivity and diffusion of innovation cutting it short, AI has imposed unprecedented impacts on various Production sectors because of its ability to generate new revenue, thus, accelerating economic growth at a prodigious rate.

Additionally, the recent breakthrough of AI is gradually reaching a point where it can be used in military applications. For instance, intrusion detection, an important part of cyber security to detect malicious network activity before it compromises information availability, integrity, or confidentiality, works on the principle of AI to protect critical cyber networks. Another area where AI helps to increase cyber security is Penetration testing. The Penetration testing network is often represented with attack graphs or trees that depict how an adversary can

exploit vulnerabilities to break into a system. Other Potential AI applications that strengthen defence strategies are reconnaissance using partly autonomous vehicles and sensor systems, threat evaluation in air defence systems with high temporal requirements, intelligence analysis of emerging Patterns, command and control systems, and education and training.

Moreover, AI has Proved beneficial for reducing the impact of climate change. For instance, it has helped detect deforestation through satellite imagery or aerial imagery, including gathering data about where buildings and infrastructure used to stand in the Past. Such a move is essential for Policymaking to deal efficiently with the erratic weather changes, which are caused mainly due to deforestation. Researchers from the Carbon Tracker - an independent financial think tank -

are working towards the United Nations goal of preventing the operationalisation of new coal plants by monitoring coal plant hazardous emissions with satellite imagery. The gathered data is then used to convince the energy production industry to stop installing carbon energy plants due to their dangerous environmental impacts. So, AI may prove drastically beneficial in reducing the risks involved with fast climate change.

Further, the agriculture industry has made tremendous progress with the use of AI. Companies are already developing and using autonomous robots to handle essential agriculture tasks such as crop harvesting on a huge scale and faster pace than human labour. In addition, many companies now leverage computer vision algorithms to process data captured by drones to monitor crop and soil health.

issues. The gathered data can also be used to detect soil deficiencies, Plant Pests, and crop irritants to extract data needed for Proper treatment, thus, increasing the yield of crops worldwide.

Lastly, the transportation industry has made a tremendous Progress with the AI use. One of the most ground-breaking applications of AI is the manufacturing of autonomous vehicles. Once this concept was merely a science fiction fantasy but now it has transformed into a reality. The Forbes, an American business magazine, opines that the US logistics are embracing autonomous trucks very fast to reap the benefits of AI in this field.

According to a McKinsey report, **65** Percent global goods transportation happens through trucks. Another transportation Problem People face on daily basis, traffic congestion,

is going to witness solutions through AI, as sensors and cameras embedded on roads are going to help collect the minute traffic details to assist commuters avoid congestion, seeking alternative routes. Commuters can have important details like traffic predictions, accidents or road blockages, which will save many lives.

These highlighted AI merits demonstrate its bright future in the situation where giants like Mark Zuckerberg have stated, "AI is a boon bestowed upon us and it will positively affect our lives in multiple ways." Not everybody agrees to this tech-savvy innovator. Contrary to his statement, Elon Musk, another tech innovator, argues, "AI will undermine to the survival of the human race in the not so distant future." This categorical statement by a futuristic innovator highlights challenges

that AI is going to pose to the human race in the shape of its demerits.

Despite all the benefits, AI is invading human privacy and exploiting information. For instance, in the case of social media, the algorithms have substantial control over what people choose to engage with. In other words, social media algorithms exploit the users and propagandize them in target marketing and selling. The case of the UK's Brexit vote illustrating AI power for social manipulation is one such example in which AI has been used destructively. Briefly, AI has proved detrimental to human privacy and personal identification information.

Secondly, since machines are taking over most manual work, the excessive dependency on AI-based devices leads to massive unemployment. It is already happening on an

industrial scale, where AI based systems and chatbots take the e-commerce industry by storm. It may seem an exaggeration, yet AI will play an important role in executing tasks and processing in a better way than that of humans. Therefore, AI is steadily and inevitably taking over large workforce sectors and causing mass-scale unemployment, resulting in social unrest.

Thirdly, AI pictures possible worst-case scenarios, including a complete overtake of human affairs and the incapacitation of human abilities.

According to AI researchers, machines are predicted to be better than humans in translating languages in **2024**, driving a truck by **2027**, writing a bestselling book by **2049**, and doing surgery by **2053**. Hence, it is likely that AI based machines will overpower human beings shortly.

Last but not least, the increasing Penetration of AI into numerous aspects of life has drastically changed the Perspective of decision making through advanced robot advisers that make decisions based on analytical considerations without any emotional involvement. Resultantly, machines Performs multiple tasks and execute critical decisions, either with or without human supervision. Thus, it is feared that AI would also outstrip humans in analytical learning and critical decision making.

In a nutshell, AI is machine learning that has resulted in human thrust of technological advancements. Man has reached the era of industrialization and computerization, but he has not ~~stop~~ sopped here. Instead, he is trying more and more to advance in science and technology.



The idea, a Product of computer science and its applications, AI has brought improvements and upgradation in various disciplines, including medicine, economy, security, transportation, environment and agriculture. However, the biggest dilemma people face is, the machine dominating human beings, leading to unemployment and terrorism.

Invading people's privacy and exploiting their personal information is another considerable problem

human beings face owing to AI.

However, every technology has its advantages and shortcomings. It

is for the governments, society and people to put them for correct use.

AI is a result of human brilliance

which is to be leveraged for good use, for growth and prosperity.