ASSESSMENT OF THE POSITIVE AND NEGATIVE IMPACT OF ARTIFICIAL INTELLIGENCE ON   SOCIETY

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Abstract:

The transformation brought about by Artificial Intelligence (AI) in our world will have positive and negative impact on society. How this will be balanced is everybody's guess and a subject of much debate and contemplation for many people. Being an optimist at heart, I believe the changes will mostly be good but may be challenging for some. The present research article will discuss some of the challenges that may be faced (and human being should be thinking about how to address them now) as well as also discuss about the positive impact artificial intelligence will have on society. Another issue is to ensure that AI does not become so efficient at doing the work it was designed for, that it crosses ethical or legal boundaries. While the original intention and goal of AI is to benefit humanity, it will have a negative impact on society if it chooses to achieve the desired goal in a destructive (yet efficient) manner. AI algorithms should be built to align with the broader goals of humans. Artificial intelligence algorithms are driven by data. As more and more data is collected about every person every minute of their day, our privacy becomes compromised. If businesses and governments decide to make decisions based on the intelligence they collect about us, as China is doing with its social credit system, it could turn into social oppression. The transformative impact of artificial intelligence on our society will have far-reaching economic, legal, political and regulatory implications that human being need to discuss and prepare for. Determining who is at fault if an autonomous vehicle injures a pedestrian or how to manage the global autonomous arms race are just a few examples of the challenges that must be faced. The challenges will be further analyzed in detail in the research article.

Keywords: Artificial Intelligence, Positive, Negative, Impact, Challenges, Society.

Introduction:

Artificial Intelligence (AI) is displayed by machines, as opposed to the general intelligence displayed by humans. AI is perhaps humanity's most versatile and amazing creation. The original term AI came into existence in 1956; but it has gained popularity today due to increase in the amount of data, advanced algorithms and improvements in power storage. In the 1960s the US Department of Defense began training computers to mimic human reasoning. AI paved the way for the automation and intelligent reasoning human being see in today's computers, with smart search systems designed to complete human tasks. Although Hollywood sci-fi films such as The Matrix(1999) and I , Robot(2004) have depicted AI as human-like robots that can take over the world, the current development of AI is not as terrifying or intelligent enough. Instead, A.I. has evolved as an advantage for many industries such as healthcare, retail, automation and more.

Types of Artificial Intelligence

Artificial Narrow Intelligence (ANI) or weak AI is the type of AI that is being majorly used today. It is designed to perform a single task and to do a goal-oriented job, namely face recognition, speech/voice recognition, searching the Internet. ANI is also very intelligent in completing the single-task for which it is programmed. Some of the examples of ANI are: vision recognition in self-driving cars, voice recognition in iPhones and many others.

Artificial General Intelligence (AGI) or strong AI is a thinking machine that can mimic human intelligence or behavior, including human emotions. AGI can think, understand and act in any situation from a human perspective, which is currently equivalent to not thinking. But till now no AI scientists and researchers have been able to produce any strong AGI.

Artificial Super Intelligence (ASI) is the hypothetical type of AI that cannot only imitate and understand human behavior, but also become self-aware of human-like intelligence and ability.

Researchers are working on creating such robots with human intelligence in terms of mathematics, science, sports, art, therapy, hobbies, decision making ability with emotion. However, such robots are still imaginary.

It's so clear that AI is a troublesome innovation. But AI can advance industry efficiency and production volumes. Also humans do not always put in their best efforts in tedious and meaningless tasks, whereas machines never get tired and will not complain. This is where AI begins an important job: freeing up humans to focus on interpersonal relationships and more creative tasks.

Impact of AI on society

AI has the potential to bring many positive changes to society, including increased productivity, better health care and increased access to education. AI-powered technologies can also help solve complex problems and make our daily lives easier and more convenient. While the benefits of AI are obvious, there are also important ethical and social implications that must be considered. Issues like privacy, security and job displacement are some of the challenges that come with the increasing use of AI. It is important that human being proactively address these concerns and work to ensure that AI is used for the good of society. As AI continues to evolve and gain importance in our world, it is important that human being continue to invest in its development and advancement. This includes investment in research and development as well as the creation of policies and regulations that promote responsible use of AI. By doing so, human beings can ensure that AI remains a positive force in our world, driving progress and improving lives for years to come.

AI has the potential to revolutionize education, providing personalized and personalized learning and improving learning outcomes. AI can analyze student data and provide real-time feedback to teachers and students, allowing them to adjust their teaching and learning strategies accordingly. The biggest benefit of AI in education is its ability to provide personalized learning. AI can analyze student data and create a personalized learning plan for each individual student, taking into account their strengths, weaknesses and learning styles. This approach has the potential to dramatically improve learning outcomes and engagement. The potential of AI in education is immense and is expected to revolutionize the way student approach degree and diploma programs in the future. AI-powered technologies can provide real-time feedback to students, help them stay on track with their studies and provide a more personalized and engaging learning experience.

Positive Impacts of AI

AI has the potential to bring many positive changes to society, including increased productivity, better health care and increased access to education. AI-powered technologies can also help solve complex problems and make our daily lives easier and more convenient. While the benefits of AI are obvious, there are also important ethical and social implications that must be considered. Issues like privacy, security and job displacement are some of the challenges that come with the increasing use of AI. It is important that human being proactively address these concerns and work to ensure that AI is used for the good of society. As AI continues to evolve and gain importance in our world, it is important that human being continue to invest in its development and advancement. This includes investment in research and development as well as the creation of policies and regulations that promote responsible use of AI. By doing this, human being can ensure that AI remains a positive force in our world, driving progress and improving lives for years to come.

Undoubtedly, it is a fact that AI has helped in the workplace. The advantages of Artificial Intelligence applications are massive which can revolutionize any field. Often there is human error at work as humans make mistakes whereas computers don't – if the computer is human well-programmed. Some decisions can be made through AI machines from the information already collected by the algorithm application. Thus, errors are reduced and the results are accurate. Human are afraid in taking risk while AI programmed robots can do many risky jobs for us, example: exploration from deep oceans, mining coal and oil or even working as bomb diffusers.

A common man can work for 9-10 hours a day but he also needs some breaks in between. But machines with artificial intelligence can run for 24 hours, unlike humans, these machines can work without any time limit. This can help in educational institutions or helpline centers. Man gets bored with repetitive tasks like sending mails, verifying documents again and again. But these processes can be offloaded to AI based machines and thus human activities can be reduced. For example: Banks can use these systems for verification of documents. Some advanced organizations use digital assistants, saving the need for human resources to interact with users. Instead of humans for customer care support, customer queries are resolved through chat boxes or voice boxes. Apple's Siri, Windows' Cortina, Google's OK Google are the best examples of artificial intelligence based human daily activities; which can vary from finding location, taking selfish, making phone calls, replying to mails and many more.

Employment and Office

With the help of AI, many tasks have been automated, due to which many employees have been ruined. But at the same time, AI has also created jobs and opportunities. The demand for professionals working with AI such as data scientists, machine learning engineers and AI

researchers has increased. Many traditional jobs have become extinct in the face of AI, but with the development of technology, there is a need for humans to learn new skills and keep themselves up-to-date.

Education: Online education has also improved with the help of AI. With the help of AI-based tutoring systems and personalized learning tools, students can learn at their own pace. AI chat bots are also being used to answer questions and clear doubts. AI has improved both access and quality in the domain of education, giving everyone a chance to get education. AI has the potential to revolutionize education, providing personalized learning and improving learning outcomes. AI can analyze student data and provide real-time feedback to teachers and students, allowing them to adjust their teaching and learning strategies accordingly. AI can analyze student data and create a personalized learning plan for each individual student, taking into account their strengths, weaknesses and learning styles. This approach has the potential to dramatically improve learning outcomes and engagement. The potential of AI in education is immense and is expected to revolutionize the way human being approach degree and diploma programs in the future. AI-powered technologies can provide real-time feedback to students, help them stay on track with their studies and provide a more personalized and engaging learning experience.

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Government efforts: Central government think tank NITI Aayog will soon prepare the outline of the National Artificial Intelligence Program (NAIP). With the aim of taking the benefits of Artificial Intelligence and related technologies to the general public, the government has constituted a committee under the chairmanship of NITI Aayog Vice-Chairman Rajiv Kumar. Apart from the representatives of the government, it also includes representatives of academicians and industry.It is noteworthy that NITI Aayog is going to launch several training initiatives to transform the way Artificial Intelligence is done in the country, NITI Aayog's partnership with Google will support startups and AI research through PhD-scholarship will get a boost. The Central Government has prepared a 7-point strategy which will form the basis of India's strategic plan for the use of Artificial Intelligence, the main point of which is developing methods for human-machine interaction to promote research and development in relation to Artificial Intelligence.

Apart from the representatives of the government, it also includes representatives of academicians and industry. It is noteworthy that the government is planning to promote research, training, human resources and skill development in the fields of Artificial Intelligence, Digital Manufacturing, Big Data Intelligence, Robotics, Real Time Data and Quantum Communication. In the current budget, the government has made a provision of $480 million for Fifth Generation Technology startups

which includes Artificial Intelligence, Machine Learning, Internet of Things, 3D Printing and Block Chain.

Ensuring security in AI systems

Attention to ethical, legal and social aspects for the application of AI. So ensuring the security of artificial intelligence systems is of utmost importance. Scientists associated with Artificial Intelligence in India believe that the AI market can reach $153 billion in 2020. In this context, the Government of India should create such a platform through which new jobs can be created along with research. Analysts believe that the worrying aspect of AI is that these machines will be able to learn and improve themselves and will start thinking, understanding or working at such a fast speed that the path of human development will change. Scientists believe that dependence on AI will not be good for humans and also complete information has not been received about who will be able to control these machines if they start taking decisions on their own. In such a situation, there is a need to balance both the advantages and disadvantages before using them. Therefore, more research and study is needed in this context.

Health Services: AI is also playing a revolutionary role in healthcare. With the help of AI-based diagnostic tools and medical imaging software, doctors and healthcare professionals can provide better treatment. AI has helped in providing healthcare services even in remote areas. AI also helps in detecting diseases faster and developing new medicines.

Entertainment: AI has also shown its impact in the entertainment industry. New platforms like AI-generated music, video games, and virtual reality experiences have emerged that are changing the way human being are entertained. AI content recommendation engines also suggest movies and TV shows according to our preferences.

Creativity and responsibility in the near future: The transformative potential of artificial intelligence has been present in our lives for some time, heightened in the early 21st century with the rise of the Internet, increased availability of more powerful personal computers and abundant data available. Learning-based systems have evolved significantly and AI has become embedded in how human being work, learn and interact with each other and the world around us. Its influence has gained notoriety in some fields, resulting in outstanding achievements of AI systems outperforming humans in some areas, including reading comprehension, image recognition and language understanding. There is still much skepticism about the capabilities of AI in the creative field, although examples of its use are becoming common, as seen in the movie trailer created by IBM Watson's cognitive platform. However, even in this example, it played more of a supporting and time-saving role than actually leading the creative process. As AI enters the next chapter of its evolution, the world must address the many challenges arising from its ubiquitous deployment, ensuring that it is used responsibly and ethically with a focus on enhancing the well-being of humanity.

Importance of Artificial Intelligence: The medical field can benefit greatly from developments in AI. Artificial intelligence can prove to be very effective for tasks like operations. With this, it may be possible to treat more people in less time. Also, in rural areas where there is connectivity problem and lack of trained personnel in the field of health care, treatment can be done with the help of Artificial Intelligence. Artificial Intelligence also has the potential to solve challenges like misuse of pesticides and fertilizers the biggest benefits of Artificial Intelligence are going to be in the areas related to manufacturing and production. For this reason, in the last few years, many companies from these fields have spent cores of rupees on research related to AI. Actually, there

is less scope for mistakes by AI machines. The biggest feature is that the machines can be used for a long time.

The importance of artificial intelligence also increases from security perspective. For example, the robot can be used instead of army jawans. Currently, Artificial Intelligence is being used in cases such as fraud detection in the field of cyber security, irregularity in financial transactions, monitoring trading patterns. Artificial intelligence can be used for cleanliness, electricity work or cooking etc. for everyday work. Artificial Intelligence in the retail sector can be used in the discovery of the images based product, etc. By giving lecture to schools and colleges, work can be done through AI.

Artificial Intelligence has the ability to provide comprehensive incremental value in different areas globally. AI is being used to organize and manage data by financial institutions and banking institutions. AI is also used in Smartcard system. Discovering mineral, gasoline and fuel in the depth of sea level, the work of excavation in deep mines is very difficult and complex. In such a way, fuel is discovered with the help of AI. In the potential use of artificial intelligence, automated driver autonomous tracking and delivery and better traffic management. With its potential use in the energy sector, power balance and use efficiency increases. Artificial Intelligence is being used primarily in taking pictures of sports such as cricket, football, baseball and chess. Artificial intelligence can be used in newly developed smart cities and infrastructure. Apart from this, it can provide high quality life. Artificial intelligence is also being used in search of information.

Negative impact of AI on society

According to famous saying, "All that glitters is not gold" and as mentioned in the beginning, AI also has some disadvantages. Below is some descriptive information on the same:

➢ AI machines need to be repaired and maintained, but the cost is high for the organization because they are complex machines.

➢ Humans become addicted to AI machines, make themselves lazy and it creates a problem for the future generation.

➢ AI machine is replacing human efforts like repetition of work, labor etc… This may lead to unemployment in future. There is no doubt that machines work fast and with accuracy but they can never create human relationships in an organization.

➢ Due to Artificial Intelligence, all such jobs will be eliminated which are filled by posts or people who will not be able to keep pace with the technology, on the contrary, those people will also be recruited who will be adept in understanding the technology. These are some of the areas where job changes are certain to occur;

- Medical field

- Transportation (metro, air travel)

- Customer call center

- Weather department

- Crime control

- Forensic science

- Astronautics personnel

- Online shopping or other online automated options

- Banking sector

- Personal care companies

Thus, in the coming times, every field which directly or indirectly takes the help of science and technology can use Artificial Intelligence.

Conclusion: The future of AI is bright and full of possibilities. As society continues to embrace this technology, it is important that human being remain mindful of its impact and work to address the challenges that come with its growth. By doing this, human being can ensure that AI continues to play a positive role in our world, improving our lives and building a better future for future generations. AI machines can never have unique thinking skills like humans. Accepting both the advantages and disadvantages of Artificial Intelligence, the humans have to live with the fact that every innovation will have both sides. But at the same time, human being must ensure that the "Rise of the Robots" does not fall into the wrong hands and do not capture human culture.

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