**The Impact of Artificial Intelligence (AI) on Human Society**

**Fulchand Mahato**

**Department of International Relations,**

**Jadavpur University, Kolkata**

**India,**

**Gmail ID: fulchandmahato99@gmail.com**

***Abstract***

Artificial Intelligence(AI) is the simulation of human intelligence processes by machines, especially computer systems, sometimes referred to as artificial intelligence (AI) will alter not just how we carry out our daily activities and interact with others, but also how we perceive ourselves. This article will first define AI and then explain how it willaffect changes in the industrial, social and economic landscape for humanity in the twenty-first century. Artificial Intelligence has different types in present time. Modern AI has a precious positive and negative impact on human society.

**Keywords:** Artificial Intelligence, Human Society, Types of Artificial Intelligence.

**Introduction**

Since we place such a high importance on intelligence, we refer to ourselves as Homo Sapiens, or “man the wise.” We have spent countless years trying to comprehend how we think—specifically, how a small amount of matter is able to see, comprehend, predict and control a universe that is much bigger and more complex than it is. Even further, the study of artificial intelligence (AI) aims to create intelligent beings in addition to trying to understand them.One of the newest areas of science and engineering is artificial intelligence. After World War II AI began a new era of the American state. AI is frequently mentioned as the "field I would most like to be in" by scientists from various fields, along with molecular biology. A physics student would fairly believe that Galileo, Newton, Einstein and the rest had already claimed all the best concepts. On the other hand, there are still a few full-time Einsteins and Edisons available in AI[1].In the current scenario,artificial intelligence plays a diversified role in our human society. Because most of the time we want to fast and smoothly work with less time. Everyday life of us it would greatlyimpact human life like communication, automation, human psychology and other fields.

**What is artificial intelligence?**

Artificial intelligence (AI) has many different definitions because it is a general term that covers a broad spectrum of computational techniques and associated practices aimed at improving the ability of machines to perform intelligence-demanding tasks, including pattern recognition, computer vision, and language processing [2].Despite the various definitions, the common concept of artificial intelligence (AI) is that it is connected to machines and computers to aid humankind in problem-solving and streamline working procedures. In a nutshell, it is artificial intelligence that has been created by humans and shown by machines. These capabilities of human-made tools that mimic the “cognitive” skills of the inborn intelligence of human minds are referred to as “artificial intelligence” (AI)[3].With such a vague definition and the quick advancement of technology, it is not surprising that artificial intelligence evolves with time. The "AI effect" or the "odd paradox" describes this situation in which once-ground-breaking breakthroughs become commonplace and ordinary and lose their status as AI, while newer technology with more astounding capabilities is given the AI designation [4].

**Historical Background of AI**

The first workshop on artificial intelligence was held in 1956 at Dartmouth College. The participants went on to develop and direct the field of AI research. They created programs with their students that the media dubbed “astonishing”: computers were proving logical theorems, learning checkers strategies, solving algebraic word problems, and speaking English. By the middle of the 1960s, the Department of Défense had constructed laboratories all over the world and was extensively funding research in the United States[5,6].

In the 1960s and 1970s, researchers believed that their techniques would someday succeed in building a computer with artificial general intelligence and saw this as the field’s ultimate objective. In twenty years, machines will be able to perform any task that a man can, according to Herbert Simon.[6,7].

**Different types of artificial intelligence**

Eventually, we see various kinds of Artificial Intelligence. Let us discuss two types of AI, one is weak or narrow and the other is strong or general AI[8]:

a. Weak or Narrow AI: The term "weak AI" describes AI systems that are only capable of carrying out certain tasks. These AI systems do their assigned tasks exceptionally well, but they lack general intelligence. Voice assistants like Siri or Alexa, recommendation algorithms and image recognition systems are a few examples of weak AI. Weak AI operates within set parameters and is unable to generalize outside of its specialized field.

b. Strong or General AI: Strong AI, usually referred to as general AI, describes AI systems that are intelligent enough to compete with or even outperform humans in a variety of tasks. Strong AI would be akin to human cognition in that it would be able to comprehend, reason, learn and use information to solve complicated problems. However strong AI development is still mostly a theoretical endeavour and has not been completed to this point.

**The Impact of Artificial Intelligence on Human society**

**Negative Impact**

Artificial Intelligence has created avery negative impact on our human society because everything can be completed mechanically not by human beings. So let us see the negative impact AI will have on human society [9,10]:

i. AI may be developed by human creators with racial biases or selfish goals in mind, harming particular individuals or objects. For instance, the United Nations has decided to restrict the development of nuclear power out of concern that it could be used indiscriminately to eliminate humanity or to target particular races or regions in order to establish dominance.

ii. The way we live in the human community will undergo a significant societal change. Humanity must be resourceful in order to survive but thanks to AI, we can simply teach a computer to perform a task for us without ever picking up a tool. As AI replaces the requirement for face-to-face interaction for idea exchange, the human connection will eventually dwindle. As personal interactions will no longer be necessary for communication, AI will stand in the way of people.

iii. The next is unemployment because a lot of jobs will be automated. The use of machines and robots on many modern auto assembly lines has resulted in the displacement of many conventional workers. Even at grocery stores, store employees will no longer be required since digital devices may replace human work.

iv. New problems arise not just in the social sense but also in AI itself, as the AI that is being trained and taught to perform the given task may eventually take off to the point that humans have no control, leading to unexpected problems and repercussions. It refers to AI’s ability to automatically operate on its own course while loaded with the necessary algorithms, disobeying the controller’s instructions.

v. Due to the fact that AI investors would receive a disproportionately large portion of the profits, wealth disparity will be produced. It will result in a widening of the wealth and poverty gap. More people will be aware of the alleged “M” shape in wealth distribution.

vi. It’s a significant accomplishment when a machine can imitate human intelligence. It can be quite time and resource intensive as well as expensive. AI is highly expensive because it needs to run on the most recent technology and software to stay current and meet standards.

vii. The majority of laborious and repetitive operations are automated by AI technologies. We tend to use our brains less and less because we do not need to memorize information or solve puzzles to complete tasks. Future generations may experience issues as a result of this AI addiction.

viii. Morality and ethics are significant human traits that can be challenging to include into an AI. Numerous people are worried that as AI develops quickly, humans will one day become completely exterminated by it. The AI singularity is this point in time.

ix. From an early age, we are taught that neither machines nor computers have emotions. Team management is crucial for achieving objectives since humans work as a team. The effectiveness of robots over people cannot be disputedbut it is also true that human connections, the cornerstone of teams, cannot be replicated by computers.

**Positive Impact**

However, there aremany positive impacts on humans as well as especially in the field of human society. From medical diagnosis and treatment to traffic management and environmental preservation, artificial intelligence (AI) offers considerable advantages. Our fundamental rights, as well as the procedures, customsand structures of a democratic society, are all seriously threatened and challenged by the power of AI. Its penchant for automated and autonomous decision-making is replacing human deliberation and accountability and as Cambridge Analytica demonstrates, it can be used to stymie democracy, control populationsand monitor them. The task of addressing these issues falls on policymakers and the larger civicsociety[11,12,13,14,15].

**1. Automated Inquiry System**

An automatic information-retrieval system that searches its database to offer the user with specific information or “facts,” rather than making referrals to external sources based on a man-machine dialog that identifies the user’s demands.

**2. An individual's biological model**

The system periodically checks the patient’s blood flow, lung and heart function, muscular activity etc. to provide inputs to a personal biological model that can then be used to evaluate the patient’s current condition and simulate the effects of medication and treatment.

**3. Automatic Language Translator**

Already in the marketplace, low-quality computerized language translation is employed to create rudimentary but comprehensible abstracts of foreign technical articles. The input speech must first be understood before being recreated in the target language to ensure that all intended nuances are captured. Thus, such translation is only possible in the few semantic domains that existing language comprehension programs have already proven to be effective at handling.

**4. Improving Cancer Diagnosis**

1.65 million Americans were diagnosed with cancer in 2015, which is a terrifying diagnosis. It can be difficult to wait for biopsy results but AI might hasten the process of diagnosis and therapy.By 2020, Intel hopes to develop one-day precision medicine for cancer patients which would involve visiting a doctor, receiving a diagnosis and receiving a customized treatment plan—all in the space of 24 hours. Intel will be working with leaders in the healthcare industry to achieve this goal.

**5. Reframing Farming**

One of AI’s greatest impacts could be in food production — an industry challenged by a rapidly growing world population, competition for natural resources and plateauing agricultural productivity. The Food and Agriculture Organization of the United Nations (FAO) estimates that the earth’s population will balloon to 9.7 billion people on by 2050. At a time when the agricultural land available for farming is shrinking, farmers will need to grow approximately 50 per cent more crops.

**6. Computer Arbiter**

A system that somewhat successfully simulates Supreme Court rulings has been developed. The computer bases its judgments on legal precedents and the justices’ prior rulings, which reveal their prejudices. One might have the basis for an automatic arbitrator if such prejudices were replaced with a structured statement of the principles of justice. Meanwhile, such formalizationhas not yet been tried.

**7. Robot Industry**

On auto assembly lines, robot manipulators are being employed more frequently to perform repetitive activities like spot welding that can be preprogrammed and work without feedback. Simple, tactile and visual sensors would significantly widen the field of applicability. For instance, a system that could mount wheels on a hub was successfully demonstrated by the General Motors Research Lab utilizing visual methods to line up the wheel with the studs.

**8. Education purpose**

In this chapter, we looked at the numerous ways that AI is impacting the globe, such as how it’s being used to digitally transform society and improve education. We talked about the advantages of AI, such as its potential to transform many industries and improve our daily lives, as well as the ethical issues raised by its continuous development. It seems obvious that AI will shape our future to a greater extent as it continues to advance. The advantages of AI are clear, even while there are undoubtedly issues that must be resolved, such as privacy and security concerns. AI has the ability to significantly improve our lives in a variety of ways, from changing the healthcare sector to offering individualized learning experiences.

**9. Making Children Safe**

According to the U.S. Justice Department, digital technology makes it simpler for predators to produce, access and spread photographs of child sexual assault around the world.According to the National Centre for Missing and Exploited Children (NCMEC) online exploitation is widespread. Its CyberTipline got 8.2 million reports about molestation, trafficking and offensive photos in 2016 alone.Although technology may have contributed to the issue, AI might help find a solution.

**10. Local meaning and context**

The moral significance of taking into account regional interpretations of social practices and language has been emphasized by several authors. In a specific social practice or institutional environment, which has a purpose or objective and its own norms guiding behaviour in that setting, actions and language have meaning. These social and normative contexts need to be respected in our representations and design. In this context, a crucial topic that frequently arises during Design for Values in AI is to what extent an AI system should replace a human agent’s actions when carrying out a particular task, taking into account the social, normative and institutional goals of that task.

**Conclusion**

It has been acknowledged that artificial intelligence or AI has made people’s lives steadily more productive by powering numerous services and programs that assist people in performing daily tasks like connecting with friends, relatives, using email applications or using ride-sharing services. It will reassure anyone who has concerns about the usage of AI to learn that society has been making use of it for quite some time. As with other changes in life, the same has both positive and negative repercussions. But there is no doubt that AI has changed how individuals live in society. The AI algorithms must be developed to coincide with the general objectives of that of humanity [16].

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