



Artificial Intelligence's Effects on Human Society and Ethical

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Abstract: Artificial intelligence (AI) is a multifaceted tool that allows individuals to reevaluate how we combine knowledge, analyze data, and apply the ensuing insights to improve decision-making. Already, it is revolutionizing all spheres of human endeavor. The industrial revolution (IR) 4.0, 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, then analyze how it has affected the industrial, social, and economic developments that have affected humanity in the twenty-first century, before proposing a set of ethical guidelines for AI. The IR1.0, or the IR of the 18th century, significantly altered society without directly affecting interpersonal interactions. However, contemporary AI has a significant impact on our daily activities as well as how we interact with one another. In order to meet this problem, new AI bioethics concepts must be taken into consideration and established. One issue with AI is that its "intelligence" and objectives have not yet been clearly defined, which causes confusion when comparing AI to other disciplines. In this article, we dispel popular myths and misconceptions about machine learning and statistics in connection to the desired and existing status of AI. We hope that by removing the fog of obscurity surrounding AI, we can see its true face.

Keywords: Artificial intelligence, decision-making, human endeavour.

I. INTRODUCTION

Understanding what it means to be "ethical" in the context of AI and education is crucial. Additionally, it is crucial to learn about the key issues with AI in education, any potential unintended repercussions, and other factors. According to Stahl B. C. (2021a, 2021b), ethical issues and concerns about AI generally include the cost of innovation, issues with consent, misuse of personal data, criminal and malicious use, loss of freedom and autonomy, and the loss of human decision-making. Although technology also improves competitive advantage (Sayed and Muhammad, 2015), corporate information security (Ahmad et al., 2021), and customer interactions (Rasheed et al., 2015). The literature on AI ethics makes it clear that, in addition to its immense benefits, there are many obstacles that come with its advancement in the areas of moral principles, behavior, trust, and privacy, to name a few. While implementing or using AI, the educational sector must navigate numerous ethical challenges. Many scholars are continuing to study the area.

Three levels are used to categorize AI in education. First, the technology itself, including its creator, manufacturer, etc. The impact on the learner or student comes in second, followed by the effect on the teacher. Evidently, there are many issues with AI technology (Stahl B. C., 2021a, 2021b), and the education industry is no exception (Hax, 2018). The majority of difficulties and challenges, if not all, have a direct or indirect impact on education and learning. Therefore, it can be challenging to determine if AI has a beneficial ethical impact on education or a harmful one, or perhaps a mixed one. From case to instance and context to context, the discussion of ethical issues relating to AI technology will continue (Petousi and Sifaki, 2020). The following three ethical concerns of using AI in education are the main focus of this study:

- 1.Security and privacy
2. A decline in human judgment
3. Making people sluggish



II. DIFFICULTIES TO OVERCOME

Without a doubt, artificial intelligence will change the way we operate. The alarmist headlines highlight the loss of jobs to robots, but the true obstacle for people is finding their passion in new roles that call on their distinctively human skills. In the UK, AI is expected to displace 7 million current employment between 2017 and 2037, but it also has the potential to create 7.2 million new jobs. It could be difficult to deal with this ambiguity and the disruptions to some people's means of subsistence.

We need to be talking about and getting ready for the profound economic, legal, political, and regulatory effects that artificial intelligence will have on our society. The difficulties that must be overcome include figuring out who is at fault when an autonomous car injures a pedestrian and managing a worldwide arms race in driverless vehicles, to name just a few.

Will machines someday surpass humans in intelligence and become uncontrollable? While the likelihood of this eventuality is up for dispute, we do know that whenever new technology is introduced, unanticipated effects always follow. Those unexpected consequences of artificial intelligence will probably present problems for all of us.

Another concern is making sure AI doesn't become so adept at performing the task for which it was created that it violates moral or legal bounds. Although the AI's primary objective is to advance humanity, society would suffer if it chose to accomplish this aim in a harmful (but effective) manner. The fundamental aims of humans must be reflected in the AI algorithms as they are developed.

Data is the fuel for artificial intelligence algorithms. Our privacy is jeopardized when more and more information is gathered about every minute of every person's day. If organizations and governments decide to make choices based on the information they learn about you, like China does with their social credit system, it could devolve into social oppression. Guidelines for Trustworthy AI in 2019 indicated that AI systems ought to be dependable, transparent, and impartial. There are three emphases:

1. Lawful – abiding by all rules and laws that apply
2. Ethical values and principles that are respected
3. Robust—able to adapt to its social surroundings and be trustworthy, dependable, and fair from a technical standpoint.

III. SEVEN REQUIREMENTS ARE RECOMMENDED

- AI shouldn't violate people's autonomy. Humans should be able to interfere in or supervise any choice that the software takes, and AI systems shouldn't be able to influence or compel people. It should be reasonably dependable and not easily vulnerable to outside threats.
- AI systems should only acquire private and secure personal data. It shouldn't be readily stolen and shouldn't be accessible to just anyone.
- An AI system's data and algorithms should be available, and human beings should be able to "understand and trace" the software's judgments. To put it another way, operators must be able to justify the choices their AI systems make.
- All people should have access to AI services, regardless of their age, gender, color, or other traits. Similar to that, systems shouldn't be biased in this way.
- AI systems should be auditable and covered by current laws for corporate whistleblowers.
- AI systems should be sustainable (i.e., ecologically responsible) and "enhance positive social change." Systems' unfavorable effects should be acknowledged and communicated beforehand.

Beneficial Impact

However, there are also a lot of benefits for people, particularly in the area of healthcare. AI enables computers to reason, learn, and use logic. Together, scientists, medical researchers, physicians, mathematicians, and engineers can create an AI that is focused on medical diagnosis and therapies, providing dependable and secure platforms for the delivery of healthcare. In addition to helping with analysis, digital computers can also help medical researchers and health professors uncover innovative and effective ways to treat ailments. Robotic systems can then be developed to do some sensitive medical procedures with accuracy. Here, we can observe how AI benefits healthcare.

Rapid and precise diagnosis

The diagnosis produced by IBM's Watson machine is remarkable. The computer's diagnosis will be made promptly after the data has been loaded. AI can offer doctors a variety of therapeutic options to take into account. To feed the digital findings of the physical examination into the computer, which will take into account all scenarios, automatically determine whether the patient has any inadequacies or illnesses, and even recommend various forms of treatment options.

Socially beneficial robots



Seniors are advised to get pets to relieve stress, lower blood pressure, deal with loneliness, and boost social engagement. Now, cyborgs have been proposed as companions for those elderly people who are alone, even as helpers for some household duties. Seniors and physically disabled people's quality of life is improved by therapeutic robots and socially helpful robot technologies.

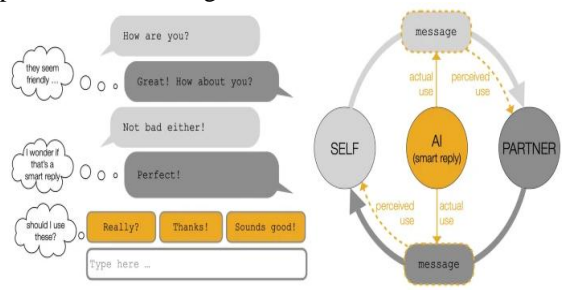


Figure I

Left: An illustration of a message exchange with AI support (i.e., a messenger with smart-reply capabilities). Orange text at the bottom depicts typical instances of intelligent responses and how they might be displayed to a user. Right: An abstract illustration of how AI affects human communication. AI assistance may be made available to one or both participants (for instance, in the form of intelligent responses). Participants have the option to use AI support (real use) or not after being provided access to it. Participants, however, make assumptions about AI support (perceived use) regardless of actual use. The entire message exchange and the opinions that people form of one another are influenced by both real and perceived use. [6] emphasized that Security is an important issue in current and next-generation networks. Blockchain will be an appropriate technology for securely sharing information in next-generation networks. Digital images are the prime medium attacked by cyber attackers. In this paper, a blockchain based security framework is proposed for sharing digital images in a multi user environment. [7] discussed about diabetic retinopathy from retinal pictures utilizing cooperation and information on state of the art sign dealing with and picture preparing. The Pre-Processing stage remedies the lopsided lighting in fundus pictures and furthermore kills the light in the picture.

IV. CONCLUSION

AI has a big potential impact on the education industry. Although technology aids with many academic and administrative chores and enhances education, its worries

regarding the loss of decision-making, laziness, and security might not be disregarded. AI exists in the world now. We should remember what AI pioneer Joseph Weizenbaum said, that we shouldn't allow computers make key decisions for people since AI as a machine will never have empathy or the ability to assess morality. Bioethics is a process of conscientization rather than a matter of calculation. AI is still a computer and a tool, despite the fact that its creators can upload all the information, data, and programming necessary for it to behave like a human being.

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