

The Risk and Benefits of Artificial Intelligence

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Introduction

Before beginning, Artificial Intelligence is a type of technology that creates information based on human intelligence. Artificial Intelligence and ChatGPT are always changing and becoming more advanced as the technology industry increases. According to Michael Torrence from *A transformative future with AI* magazine, “the integration of AI and other advanced technologies into the workplace will drive new ways of thinking and problem-solving” (Torrence, 2023). In other words, this type of technology could lead to the creation of new jobs and opportunities. Thus, making the world of technology highly advanced in the professional and educational environment.

Additionally, Artificial Intelligence is normally associated with the field of computer science. But there are also a lot of different fields that have a connection to AI such as math, biology, philosophy, and so many more. When it comes to the school environment, AI can be very useful to students, but it could also be very dangerous while in a professional environment. For students, AI can be a useful tool to assist with assignments or exams but also has a dangerous component which is the lead up to cheating and plagiarism. In the work or professional environment, AI or ChatGPT can be a useful tool to decrease inaccuracy but using this human intelligence tool in the workplace could cause job loss or lack of creativity. Therefore, Artificial Intelligence technology is increasingly becoming more useful, but it has also become damaging. With this being said, the purpose of this paper will be to inform the reader of the risks and benefits of using an Artificial Intelligence technology system.

Background

According to Rockwell Anyoha from Harvard University, Artificial Intelligence was first introduced in the late 1950's when different scientists and mathematicians thought of the idea (Anyoha, 2017). But there was one mathematician in particular who explored the possibility from a mathematical perception. His name was Alan Turing, and he was a talented, British child who had the thought process of creating a human intelligence system which had the same intellect as a human. But, considering that computing was expensive back then, he had a set back while trying to figure out how to change the computer system. Meanwhile, five years later, three other people created a program called the "Logic Theorist." Allen Newell, Cliff Shaw, and Herbert Simon created the first artificial intelligence program that was designed to problem solve and have the same intellect as a human being. After quite a few setbacks in the program, AI finally skyrocketed in the years 1957 to 1974.

Potential Benefits

Artificial intelligence has been thoroughly found that it has a lot of benefits today. According to the *Analyzing the Strengths, Weaknesses, Opportunities, and Threats of AI in Libraries* Journal, that was published in 2023 by Parbat Chhetri, there are many benefits of AI in libraries or the workplace in general. Some of these benefits include the improvement of AI devices in information retrieval systems, the ability to automatically complete repetitive tasks, improvement of decision making, and so many more (Chhetri, 2023). Therefore, these benefits allow AI to be able to process information quicker and more efficiently.

Additionally, the school environment has benefits of the use of the AI and ChatGPT. (Chung, 2023). According to Kwan Chung, ChatGPT can serve as an independent online tutor for students who need more assistance on their studies (Chung, 2023). To be completely honest, your parents or a real tutor may be the best choice to get the right information but, if there is no one that is available to help you then AI can be beneficial. In conclusion, these benefits can be a helpful way to access information but can be a harmful result if it's used in the wrong way.

Potential Risks

There is no doubt that Artificial Intelligence has its benefits but, the risks of AI are very real and could be damaging. For instance, high school students are now relying on AI to help them cheat on tests, which could lead to the failure of their grade. Working with AI technology can be worrying because the speed of decision-making in this technology is so unknown. With this being said, according to Takara Small from the Globe and Mail Blog, "A lot of AI programs, including ChatGPT, scrape the internet for personal, public and even copyrighted data to power their tools" (Small, 2023). This indicates that it is challenging to leave the Artificial Intelligence system in any sort of way. This is because this technology has a very strong hold on personal and copyrighted information. Takara Small states, "Earlier this year, researchers found ChatGPT, the chatbot that created a global frenzy when it was released and then temporarily banned in Italy, misrepresented facts, and faked research studies" (Small, 2023). To elaborate, early on in 2023, researchers found that AI and ChatGPT are creating falsified studies based on fabricated information. Although AI is a very useful and resourceful technology tool, the risks of this unknown system are very real and can be unnerving.

Legal and Ethical Issues

The use of Artificial Intelligence can cause many challenges in either a legal or ethical way. In a Legal manner, the issues with data privacy, discrimination, and tort liability (taking responsibility for any wrongdoing) can cause major problems in AI. As far as data privacy goes, associations must be transparent with their members about how their data will be collected, used, and protected, and must obtain the necessary member consents to use and share sensitive data (Tenenbaum, 2023). This is because members have a right to confidentiality so, when their information enters an AI system, it will no longer be protected information. In a discrimination matter, associations must make sure that their AI systems do not discriminate based on race, ethnicity, national origin, gender, age, disability, or other legally protected characteristics (Tenenbaum, 2023). In other words, if AI discriminates against someone who has an accent or hearing impairment, then that could possibly lead to illegal discrimination. As far as tort liability goes, if any type of Artificial Intelligence technology creates inaccuracy that could harm other members, the association could be potentially held liable for any damages caused (Tenenbaum, 2023). To ensure that none of these legal issues take place, the companies that are working with AI must make sure that their information is accurate and efficient.

In an Ethical manner, the use of Artificial Intelligence can cause some challenges while being used. The use of Artificial Intelligence has increased rapidly and as a result, this technology has created many opportunities worldwide (UNESCO, 2023). Due to the rapid changes, there have been ethical concerns such as embed biases, the contribution of climate degradation, threatening of human rights, and more (UNESCO, 2023). In the recent changes of the ethical concerns regarding AI, everyone needs to be able to respect and protect the fundamental rights, freedoms, and privacy of others while being able to coexist.

Privacy and Security Concerns

While Artificial Intelligence has its benefits, there is bound to be a significant number of concerns in the security aspect. The security aspect of AI is very important to maintaining the key to your personal data. In fact, people who use Artificial Intelligence may not even be aware that their personal data is being used through the technology system. According to Brandom Pugh, there are internal and external warnings that could lead to the process of disclosing private or sensitive information (Pugh, 2023). In the possibility of leaked information, it is very important that certain organizations follow the cybersecurity standards that are developed by U.S. National Institute of Standards and Technology (Pugh, 2023). In other words, the security concerns of Artificial Intelligence could be the cause of revealing private information to outside sources. The use of Artificial Intelligence could be very useful but using it the wrong way can be exponentially damaging to the safety of people's confidential information.

Additionally, Artificial Intelligence presents a challenge of privacy because of the difficulty of different AI systems. The AI systems are constantly becoming more complex and because of that, the decision-making process can be harmful to even someone's identity. The importance of privacy is a very essential human right that needs to be protected at all costs. According to Dr. Mark Van Rijmenam, one of the primary challenges in Artificial Intelligence is the use of this technology system to violate privacy (Rijmenam, 2023). Since AI requires an extensive amount of personal data, if this kind of data falls into the wrong hands it could be used to cyberbully or steal someone's identity (Rijmenam, 2023). In other words, the information used to protect a person's identity could be violated due to the conflicts of Artificial Intelligence. Thus, making sure that all of your personal, confidential information is protected is very important to consider while using any type of Artificial Intelligence.

Social Problems

Today, many people encounter social issues in their daily lives including lack of education, poverty, inequality, and more. These issues can also be applied in the Artificial Intelligence system. With that being said, as Artificial Intelligence is becoming more involved in everyday life, the number of social problems is increasing. As the social problems increase, the focus should be on how AI can improve their transparency to the average person. Some of these social problems include the decrease of human interaction and the overreliance of technology. According to John Bailey from Education Next, the use of Artificial Intelligence is resulting in the lack of connection between individuals in the workforce and the over reliant use of AI-driven technology (Bailey, 2023). Therefore, if the social problems of Artificial Intelligence do not improve, society will be severally negatively impacted.

Conclusion

In conclusion, there is no doubt that Artificial Intelligence will continue to improve their system to make it safer and more reliable. But the use of AI has its negative effects as well as its positive effects no matter how advanced the technology is. There are yet to be any permanent fixes to the risks of Artificial Intelligence but, with the help of professionals, we will soon be able to fix this problem. The Artificial Intelligence technology system is always improving and becoming more reliable to today's society, so here is hoping for a better AI future.

References

Anyoha, R. (2017, August 28). *The History of Artificial Intelligence*. Science in the News.

Retrieved September 19, 2023, from <https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/>

This Harvard University blog was used in the background section of my paper to give the readers a feel of how AI came to be. In this blog, the main purpose was to inform on the history of Artificial Intelligence and ChatGPT. Artificial intelligence was introduced in the late 1950's when scientists and mathematicians thought of the idea of creating a human intelligence technology system. One scientist thought of the idea to create this system and his name was Alan Turing. To summarize, the history of AI had a big impact on society today and continues to improve.

Bailey, J. (2023, August 8). *AI in Education*. Education Next. Retrieved September 19, 2023,

from <https://www.educationnext.org/a-i-in-education-leap-into-new-era-machine-intelligence-carries-risks-challenges-promises/>

In this article from Education Next, the key points that I wrote about was the social problems developing in the Artificial Intelligence system. This article tells me that there is a lack of connection between individuals and how the work environment is being overrun by AI technology. The lack of connection between individuals and technology causes fewer social skills and people interactions. As the work environment is being overrun it has caused the skill set to be at a lower standard because the individuals are being over reliant on technology. In summary, the use of Artificial Intelligence in the

workplace is causing more people to lose their social skills because of the over use of this technology.

Chhetri, P. (2023). Analyzing the Strengths, Weaknesses, Opportunities, and Threats of AI in Libraries. *Library Philosophy and Practice*, 1-14.

<http://mutex.gmu.edu/login?url=https://www.proquest.com/scholarly-journals/analyzing-strengths-weaknesses-opportunities/docview/2847938947/se-2>

In this article from ProQuest, the author informs the readers about the potential benefits, and the strengths of the Artificial Intelligence systems. In my paper, I incorporated the benefits of AI in the workplace including the quick decision making and the process of automatically completing repetitive tasks. I felt as though including this article in my paper was needed, especially because it thoroughly goes through the benefits, risks, and security aspects of Artificial Intelligence in the work and school environment.

Chung, K. L. (2023). What Is the Impact of ChatGPT on Education? A Rapid Review of the Literature. *Education Sciences*, 13(4), 410. <https://doi.org/10.3390/educsci13040410>

In this Journal, from MDPI Open Access Journals, the main purpose in my paper was to explain and have people understand the impact and the importance that AI and ChatGPT have on the education of students. I used this source under the Potential Benefits heading to talk about the way that AI can be a useful tool to students who need individual help outside of the classroom. I discussed this topic but, I also assured that this tool is used as a last resort if there is no one else to help you learn individually. The journal thoroughly goes through the benefits and the concerns but, in this case, I just used the benefits.

Pugh, B. (2023, July 12). *What does AI need? A comprehensive federal data privacy and security law*. International Association of Privacy Professionals. Retrieved September 19, 2023, from <https://iapp.org/news/a/what-does-ai-need-a-comprehensive-federal-data-privacy-and-security-law/>

I got this source information from a website from Brandon Pugh who explains the security and data privacy aspects of Artificial Intelligence. In this paper, I talked about the protection of your personal data and how to handle the process of leaked information. The many aspects of security are talked about in my paper as well as the website source. The release of private information to the world is a big aspect of security and making sure all of your data stays safe.

Rijmenam, M. v. (2023, February 17). *Privacy in the Age of AI: Risks, Challenges and Solutions*. The Digital Speaker. Retrieved September 19, 2023, from <https://www.thedigitalspeaker.com/privacy-age-ai-risks-challenges-solutions/>

I used this article from The Digital Speaker in my paper to talk about the challenges of privacy in the AI technology system. The privacy of AI is very important especially because this system is becoming more complex every day. Considering that privacy is really important, the privacy of AI needs to be protected by making sure that there is no violations or stealing anyone's identity. To summarize, the reasons of AI having privacy issues has to be protected not only to the internet but also to the individuals that are being violated through AI or ChatGPT.

Small, T. (2023, May 12). *The downside of AI: Former Google scientist Timnit Gebru warns of the technology's built-in biases: As artificial intelligence tools become ubiquitous, Timnit*

Gebru is an outspoken advocate for ethical AI. [www.proquest.com](http://mutex.gmu.edu/login?url=https://www.proquest.com/blogs-podcasts-websites/downside-ai-former-google-scientist-timnit-gebru/docview/2812357257/se-2?accountid=14541). Retrieved from <http://mutex.gmu.edu/login?url=https://www.proquest.com/blogs-podcasts-websites/downside-ai-former-google-scientist-timnit-gebru/docview/2812357257/se-2?accountid=14541>

In this blog, I used the information to talk about the downsides or the disadvantages of Artificial Intelligence. In the AI world, there are bound to be risks as well as benefits but dealing with either one of these is hard. Some of the risks include the speed of decision-making, overreliance, and more. The speed of decision-making is so unknown that we don't know how it happens so it could be considered a risk in the Artificial Intelligence world. As well as decision making there is also overreliance. A lot of students rely too much on the use of technology that it could be potentially damaging to their future. To summarize, the risks of AI are a real reason for deciding not to use this technology but by using it, it could also be a reliant approach.

The United Nations Educational, Scientific, and Cultural Organization. (2023, April 21).

Artificial Intelligence - Ethics of Artificial Intelligence. [www.unesco.org](https://www.unesco.org/en/artificial-intelligence?hub=32618).
<https://www.unesco.org/en/artificial-intelligence?hub=32618>

In this article, I used the information to talk about the ethical and social implications of Artificial Intelligence and the educational and the workplace issues as well. Some of the ethical concerns include the threatening of human rights, climate degradation, and embedded biases. These concerns will be the downfall of the AI system if the protection of these rights is diminished. In the article the explanation of the different issues, the uses, and the advancements of AI technology are spoken about. To summarize, the ethical

issues of Artificial Intelligence are going to be an issue if they are not protected at all costs.

Tenenbaum, J. S. (2023, April 27). Five Key Legal Issues to Consider When It Comes to Generative AI. ASAE. Retrieved September 19, 2023, from

https://www.asaecenter.org/resources/articles/an_plus/2023/4-april/five-key-legal-issues-to-consider-when-it-comes-to-ai

I used this Article source as a source of information in my paper to explain the legal issues of what could happen with the usage of Artificial Intelligence. Some of the issues I talked about regarding legal manners are the data privacy issue, discrimination, and tort liability. These issues can be major problems for individuals dealing with AI. The article explains the fact that transparency is the key to the AI system as well as how individuals information will be used and protected.

Torrence, M. (2023, Jun 20). A transformative future with AI. Community College Daily

<http://mutex.gmu.edu/login?url=https://www.proquest.com/newspapers/transformative-future-with-ai/docview/2827808349/se-2>

I used this Newspaper article as a source of information to use to explain the future uses of Artificial Intelligence in the workforce and in the educational system. I utilized this source in the introduction section to give some background on what AI could look like in the future before starting my paper. If Artificial Intelligence improves in the future, it'll create new ways of thinking and problem-solving. The main topic of this Newspaper is to inform the readers on the possible future of AI and ChatGPT in the educational and

professional environment. To summarize, the future of AI is unclear, but it is still possible for it to make improvements.