Running Head: Artificial Intelligence

Artificial Intelligence and the Associated Threats

Anish Ghimire

[Ghimire.An@cwu.edu](mailto:Ghimire.An@cwu.edu)

Central Washington University

December 2, 2022

# Abstract

This research paper aims to examine the significance of Artificial Intelligence (AI), its future trajectory, as well as the associated threats that accompany it. AI has revolutionized technology, providing immense opportunities for economic growth, improved decision-making processes, and increased efficiency in production. However, AI also carries considerable risks, such as personal data security and privacy issues, ethical dilemmas related to autonomous decision-making, and increased job loss due to automation. This paper will evaluate the current state of AI and its impact on society, discuss potential opportunities for further development, and explore the threats posed by rapidly advancing technology. By examining these topics in detail, this paper seeks to provide an informative insight into the current state of AI and its associated risks. Ultimately, this paper hopes to encourage further research regarding AI development, assess potential risks posed by new technologies, and inform stakeholders of the potential consequences faced if appropriate precautions are not taken. This research paper will benefit stakeholders in the industry, the government, and academia. It provides insights into the potential benefits of AI technology and its associated threats, allowing them to make better decisions when planning future strategies or developing new products. Moreover, this paper also offers an important evaluation of current methods for mitigating risks posed by AI technology and proposes solutions for reducing these threats. In conclusion, this research paper will provide a comprehensive overview of the current state of Artificial Intelligence, its future trajectory, and the associated risks that must be addressed to ensure long-term success.

***Keywords*:** Artificial Intelligence, Protocols, Ethics, Trajectory, Threats, Revolution

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# Introduction

Artificial Intelligence (AI) is a rapidly growing field of technology that has the potential to revolutionize the way people interact with machines and the world around them. AI refers to computer programs or systems capable of performing tasks typically requiring human intelligence, such as visual perception, speech recognition, decision-making, and language translation. It has been used for various purposes, ranging from medical diagnosis to self-driving cars. Given how quickly AI technology has advanced, its influence on people's lives is undeniable. AI has already infiltrated many aspects of life, from self-driving cars to customer service bots, and these applications are likely just the beginning of what AI can do. Technology is advancing quickly and will soon become even more advanced than it is today. The potential for misuse of AI should not be taken lightly. (Alekseev, 2020)

With autonomous vehicles, if a hacker were able to gain access to the programming behind them, they could cause great harm by manipulating the vehicle's movement. In addition, algorithms can be programmed to make decisions based on biased data sets or inaccurate information which could lead to unjust outcomes or unsafe practices. In financial services too, AI-powered trading systems can be manipulated to give one party an advantage over another. The risks of using Artificial Intelligence are real, but some steps can be taken to ensure its safe use. Governments should continue to monitor the development of AI technology while adhering to strict regulation protocols that protect consumers' privacy and security (Crawford, 2020). The significance of artificial intelligence, its future trajectory, and its associated threats to society are all covered in the subsections that follow.

# Artificial Intelligence

Artificial Intelligence (AI) has become increasingly widespread, raising both excitement and apprehension about its implications for society. AI is being used to automate processes in a range of industries, from transportation and healthcare to retail and tourism. It promises to offer unprecedented opportunities for improving efficiency, accuracy, and personalization, but it also carries the potential for unintended consequences. This article will provide an overview of the two sides of Artificial Intelligence – the promise of enhanced experiences through automation as well as the potential ethical concerns associated with it – by drawing on insights from research by from various resources and perspectives. Ultimately, this article will suggest that while Artificial Intelligence holds great potential, it must be carefully managed to ensure it is used responsibly and ethically. In the tourism industry, AI can be used to create personalized experiences for consumers by allowing them to access tailored destinations and activities based on their preferences. Grundner and Neuhofer (2021) argue that such automation could revolutionize the industry, leading to more efficient operations and improved customer satisfaction. Additionally, AI can be used to monitor tourist activity to better understand visitor behavior, enabling organizations to make informed decisions about how best to cater to their customers. On the other hand, Artificial Intelligence also carries serious ethical considerations. Crawford (2021) argues that there are concerns about excessive costs associated with developing AI technologies as well as questions about who will ultimately benefit from them. Moreover, there is a risk that AI could be used to manipulate or exploit users by collecting personal data without their knowledge and using it for marketing purposes. Due to its immense significance and potential for the future, AI should be responsibly handled. In addition to its advantages, AI also poses several risks, which are covered below.

## Significance of Artificial Intelligence

The significance of Artificial Intelligence (AI) is undeniable. In a world where technology and automation are becoming increasingly prevalent, AI has positioned itself as the driving force behind many industries. From its ability to improve decision-making processes to its potential to revolutionize mundane tasks, AI provides new opportunities for humanity in ways that have never been seen before. In addition, AI technologies can provide greater insight into healthcare, transportation, and legal systems. For example, AI can detect cancerous cells earlier than ever or identify patterns in criminal behavior that would otherwise go unnoticed. Furthermore, AI algorithms are being developed that could help reduce traffic congestion and make our roads safer for drivers and pedestrians alike. Talking AI in the legal system helps in generating faster legal opinions and assists lawyers in researching relevant laws. However, AI is only as powerful as its algorithms. This is where commands come into play; they are the backbone of any successful AI system. As technology evolves, AI will continue to play an ever-greater role in our lives. One must embrace its potential to maximize its benefits and minimize associated risks.

With the proper preparation and education, there's no telling how far AI can take us. Lee (2018) explains that artificial intelligence has made a dramatic impact on global economies and geopolitics as countries strive for economic advancement through technological innovation. Ruess and Burton (2022) further emphasizes the importance of safe AI practices when exploring the potential benefits. Walsh (2018) provides a vision of a future in which AI is ubiquitous, and its positive effects on society are wide-reaching. Finally, Nekrasov's (2019) explores the implications of incorporating AI into legal systems and how it could affect the fairness of criminal proceedings. Overall, Artificial Intelligence can revolutionize many aspects of our lives. With the proper preparation and education, there is no telling what opportunities AI technologies can provide us in years to come. However, it is essential to take steps to ensure that these technologies are developed and used safely and ethically. With the right approach, Artificial Intelligence can be a powerful tool to help shape our future in positive ways. By understanding its significance and potential, people can ensure that AI is used to benefit all of humanity as people move into an ever more automated world. Through continued research and development of these technologies, there's no limit to what AI can do for us in the years ahead. Consequently, it is essential to take steps to understand Artificial Intelligence to maximize its benefits for everyone. With the right approach and education, AI can be a powerful force for good in our world. The implications of Artificial Intelligence are immense, and its importance cannot be underestimated. As people move forward into an ever more automated future, AI will continue to play an ever-greater role in our lives and society. People must prepare themselves with the knowledge necessary to maximize its benefits and minimize any associated risks. By doing so, one can ensure that Artificial Intelligence becomes a positive force for good in our world. While AI is significant in the coming generation, the trajectory AI is on appears attractive.

## Future Trajectory of Artificial Intelligence

The future trajectory of Artificial Intelligence (AI) is projected to be incredibly promising, as it continues its impressive advances in technology and engineering. According to Walsh (2018), the world of 2062 will have been significantly impacted by AI, with a strong presence in healthcare, transportation, communication, and legal system. Blake et al. (2021) note that the potential applications of AI are vast and may revolutionize engineering processes across multiple industries. Anastasi et al. (2021) further observe that embedded AI-machine learning could have significant implications for the safety of machinery through enhanced reliability and performance optimization capabilities. Overall, these advancements indicate that AI technologies will become increasingly indispensable for the development of new products and services over time. As such, the future trajectory of AI is likely to continue its upward climb, with an ever-increasing presence in our lives and across numerous industries. Artificial Intelligence will become increasingly important in the years ahead as it continues its rapid trajectory.

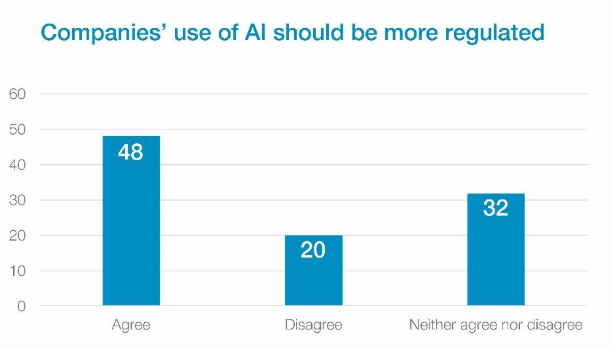
From healthcare and transportation to communication and engineering, AI technologies are expected to play a major role in driving innovation and progress. As such, the opportunities presented by AI are continuing to grow and expand, allowing us to unlock new solutions for some of society's most pressing issues. Both industry professionals and consumers alike must remain aware of the implications that AI can have on various aspects of development. The examples of trajectory for AI are plentiful and show no sign of slowing down soon. It is projected that AI will become deeply embedded in the development of new products, services, and technologies, thus revolutionizing the way people interact with the world. As a result, industry professionals need to be aware of the potential applications of AI to remain competitive in their respective markets. Furthermore, consumers must consider how AI can impact their everyday lives when making decisions about their purchases and activities. Ultimately, the future trajectory of Artificial Intelligence appears to be incredibly promising - one that will help shape our lives both now and, in the years, ahead. By remaining conscious of both its capabilities and limitations, people can ensure that AI continues its path toward becoming an integral component of our world. Artificial Intelligence will play a crucial role in the future, and it is up to industry professionals and consumers alike to strive for its responsible use. With this approach, one can ensure that AI continues to develop responsibly, leading us toward a bright future full of possibilities.

Overall, Artificial Intelligence is poised to be an indispensable component of the future with its immense potential applications in nearly all aspects of life. By remaining aware of both its capabilities and limitations, industry professionals and consumers alike can utilize AI responsibly to unlock new solutions for some of society's most pressing issues. This will help ensure that the trajectory of AI remains positive to continue driving innovation and progress into the coming years. While the trajectory AI is on appears attractive, there is a significant expense associated with it.

## Associated Threats of Artificial Intelligence

Artificial Intelligence (AI) is a rapidly developing form of technology that has the potential to revolutionize our lives, but it also poses some dangers. Walsh (2018) argues that AI could lead to large-scale unemployment, poverty, and inequality due to automation and a shift in the job market. Alekseev (2020) warns that AI’s power in the service of the state could greatly reduce human rights by providing governments with surveillance capabilities or even allowing them to manipulate citizens’ behavior. Souhail et al. (2020) suggest that AI may take over much of the construction world, leaving manual laborers unable to compete with robotic workers. All these risks highlight how important it is for governments, businesses, and individuals to understand the associated threats of AI before embracing it. It is also essential for organizations to develop safety protocols and regulations that will mitigate these risks. Through proper precautions, AI can be used safely and effectively—but that requires vigilance from all stakeholders to ensure its responsible use. Only then people can reap the full benefits of this powerful technology without compromising our security or our humanity. By understanding AI's associated threats, people can ensure it remains a force for good in the world.

AI collects people's data from various sources and can be used to identify patterns in behavior, making it easier to target vulnerable individuals and groups. AI technology could also be used to build automated systems that would make decisions about people’s lives without oversight or accountability. This could lead to discrimination based on race, gender, age, and other factors. Additionally, AI is a major component of cybersecurity solutions; however, it can also present new security risks as hackers take advantage of its weaknesses. As the use of AI continues to increase, organizations need to remain aware of these threats and develop safeguards accordingly. AI is creating a new world and it is essential to be mindful of the associated risks that come with it. Companies and organizations must ensure they are employing AI responsibly and ethically, while governments must create laws and regulations which protect citizens from potential misuse of this technology. By understanding the associated threats of AI, people can make sure it remains a force for good in the world. The picture below describes how the poll was conducted by (Bécue et al., 2021) and how businesses feel about whether AI needs to be more controlled.

Figure : Explaining companies’ use of AI

(Bécue et al., 2021)

# Conclusion

In conclusion, Artificial Intelligence poses several potential threats to our societies and economies. From the potential for job displacement to security risks associated with increased automation, AI must be carefully monitored and regulated to ensure its safe and beneficial application across industries. It will continue to be important for governments and corporations alike to stay apprised of the latest advancements in AI technology and trends, as well as possible associated threats, to adequately prepare for the implications of its widespread adoption. One can maximize the benefits while minimizing any risks posed by AI. The future of humanity depends on it. Artificial Intelligence will collect data that is used to make decisions, but if it is not supervised properly, these decisions can have disastrous consequences. With proper regulation and oversight, Artificial Intelligence can revolutionize our societies and economies for the betterment of all humans. Only then will the potential of this technology be fully realized. If done right, the future of all humanity could be brighter than ever before.

The implications of Artificial Intelligence on society are vast and largely unpredictable. There are a few risks associated with advancing technologies such as AI, however, by implementing strict regulations people can ensure that these risks are minimized, and AI remains an asset rather than a detriment to mankind’s progress. Although there are still a lot of unknowns, proactively managing the potential threats of AI is the best way to ensure that it brings us closer to a brighter future. Only with proper supervision, AI will be beneficial. Artificial Intelligence has immense potential and with the right governance structures in place, its advantages will far outweigh any drawbacks. In short, by considering the associated risks of AI and regulating it responsibly, people can use it for our collective benefit rather than our detriment.

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