

# ARTIFICIAL INTELLIGENCE TOOLS AND APPLICATIONS

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## **ABSTRACT**

*In this paper, the author discusses how the techniques and methods of the workforce are being replaced by Artificial Intelligence (AI), which could be both advantageous and disadvantageous. The concepts of AI and Machine Learning (ML) could be helpful to many students, artists, engineers, marketing professionals, and job professionals when used with caution.*

## **KEYWORDS**

*Artificial Intelligence, Machine Learning, Security, Hackers, Cloud.*

## **1. INTRODUCTION**

Artificial Intelligence (AI) is an advancing technology preferred and adapted by many industries, students, and job professionals. Almost every industry tries to adapt AI to provide an advanced customer experience level. Many developers have developed AI-based tools that provide users with easy access to information and an interactive experience while chatting with the AI bot. Google has introduced an AI bot that lets users ask any question they have to receive an immediate response. Some AI tools support voice messages as well. The sphere in Las Vegas, Nevada, was built entirely to provide an AI experience to its visitors. Even the outer wall of the sphere displays the power of AI. The sphere has also shown us that developers and companies can use AI in many ways [1]. Machine Learning (ML) is a subset, a subtopic within AI. ML frameworks like Scikit-learn, PyTorch, and TensorFlow help developers create predictive models that simplify complex processes within model training, data processing, and evaluation [2].

## **2. CHAT GPT**

Chat GPT is an AI-based tool that helps its users by providing the answers to the topics they need. The answers provided by Chat GPT are in basic English, enabling the users to understand the solutions. Many students and IT professionals use Chat GPT to help them finish their homework, assignments, and tasks. Chat GPT also allows students and IT professionals to learn about a new topic. It also helps them with the interview preparations. Many organizations have implemented Chat GPT in their processes to automate tasks. This approach is both advantageous and disadvantageous. It is beneficial as this approach helps organizations by providing immediate solutions to their tasks and requirements. But, the major disadvantage is that humans are losing their jobs for AI [3].

### **3. DALL-E**

This AI tool helps users by converting their text into images. Students and job professionals widely use this tool to add photos to their presentations based on their topic or subject information. This tool also helps artists in creating art work and AI images to present their work in a better way. Many might not know this tool, as only a few used AI to generate images. But this might be widely used when AI becomes more popular than it is today. While using AI tools, we need to be safe with the data we provide the AI with. The major drawback with this tool is the images or data used. It is secure if the tool does not store the fed data. However, if the tool stores the fed data, the organization that developed the tool must ensure that the AI tool's data is constantly being protected from getting hacked or misused [4].

### **4. OTTER.AI**

Otter is another AI tool that helps users auto-type their speech. This tool could be widely used in classrooms to take notes as sometimes it could be challenging for many students to take notes as the Professor speaks. This could also be used to record organizational meetings, review them later, share them with the team, and revisit the meeting notes if needed. This is a convenient AI tool that records speech. The drawback with this tool could be that AI could record the voice and store it for recognition, and a hacker could misuse this if the hacker gets a hold of the data [5].

### **5. GOOGLE ASSISTANT**

Google Assistant is the AI tool used by Google. Google operates this AI tool based on the speech. As many users prefer Google over others for the data and reputation it holds, this tool could be used worldwide. Even if Google operates and owns this, it is still an AI tool. And as Google has a vast database with an immense amount of data, many hackers could try to attack their network and steal the information. It is always safe to be cautious using AI tools as they do not provide us with one hundred percent security; they are just machines prone to making mistakes [6].

### **6. ARE AI TOOLS SAFE TO USE?**

With the usage of AI tools come risks and threats. Even when AI makes its usage easy for humans, it is still prone to risks and threats. As AI and ML machines use data, specific AI tools can easily misuse this data, while some tools could send corrupted data. Analysts must monitor AI and ML tools continuously to provide users with a safe experience [7].

### **7. ADVANTAGES OF AI TOOLS**

- AI helps in problem-solving.
- It helps in automating the tasks.
- It helps in decision-making.
- It helps in cost reduction.
- It helps in analyzing the data.
- It helps in increasing productivity.
- It helps in assessing the risks [8].

## 8. DISADVANTAGES OF AI TOOLS

- It entirely depends on the data.
- It needs more creativity.
- It has significant privacy concerns.
- They are incredibly costly [8].

## 9. CONCLUSION

Artificial Intelligence (AI) is not always safe to use. It might provide the user with an advanced experience level, but still being fed with our data could be risky. AI can transform many fields, improve efficiency, and provide new solutions. AI collects and stores the data from and in the cloud, which could make the data vulnerable. If a hacker hacks into the storage cloud, he can access all the data. Another major drawback of AI is the decrease in the workforce. As AI and ML help create a robot that can replace a human being, there would be no work or use of human existence. This could incur significant losses to many households. The developers or companies that build the robots could profit from the sales and usage, but it is still a machine, not a human being. A human being could think independently and be flexible with the work needed, while AI would have its restrictions. The author wants readers to decide if adapting to the AI world is worth it. The author personally thinks that only some needs can be fulfilled by AI and that the workforce is vital to helping organizations grow. AI could be exciting, but it is essential to maintain caution while using AI and ML methods and tools.

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## AUTHOR

**Nikitha Merilena Jonnada**, earned her PhD in Information Technology (Information Security Emphasis) from the University of the Cumberland in 2024. The author is continuing her research within the security emphasis and is also expanding her research into artificial intelligence and machine learning to develop security measures using the latest technology standards.

