

Part I:

Research Paper topic and outline

AI is Growing, but are We Growing with It?

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IT150G,15631; 11:00 am – 12:15 pm; Ziwei Ye; September 22,2024

I. Introduction

A. Motivation of this research

I chose this topic because the use of Artificial Intelligence (AI) has become a huge part of our everyday lives. AI is used in healthcare, retail stores, cars, fast food chains, and more. It cannot be avoided, and the younger generation has liked this feature, but the question lies in whether AI is useful or harmful to the young minds that use this resource. Schools have begun to fight against the increased use of AI in students' work, but how does this affect students? In the world of Cybersecurity, we must know these impacts of AI on the students' minds. This knowledge will allow us to plan and prevent vulnerabilities and breaches that can be caused using AI as well as ensure this resource is a tool that will help young minds flourish and become able minded citizens vs the alternative.

B. Research question and objectives

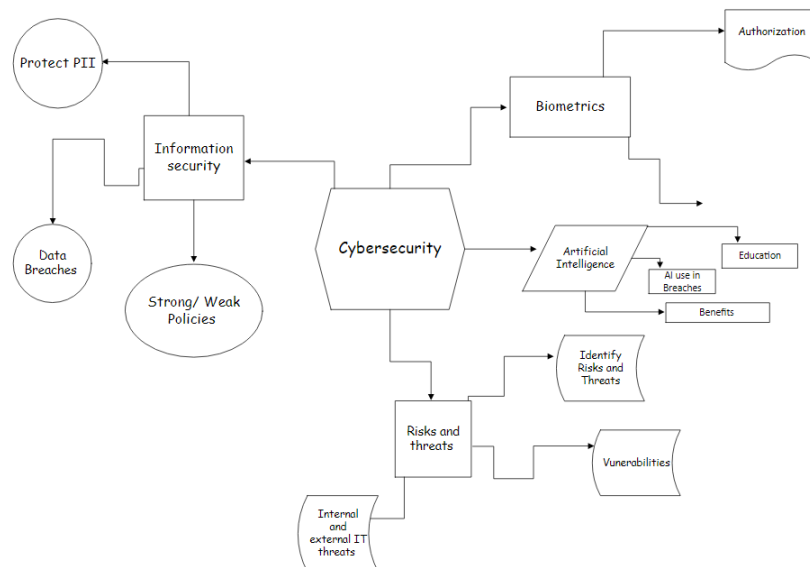
Does the use of AI in education create smarter students? My research objectives are to find the students correlation between student knowledge and the use of artificial intelligence. Then to compare data to see if student knowledge has increased or decreased because of AI use in educational settings.

II. Overview

A. Background of your research idea

Artificial Intelligence (AI) is the ability of a digital computer to perform tasks commonly associated with intelligent beings (Copeland, 2022). The first successful AI program was created in 1951 by Christopher Strachey where the computer system could complete a competitive game of checkers at a reasonable speed (Copeland, 2024). With the increase in technological intelligence, this resource has grown and been brought to our schools and students. In the 1970s and 1980s, AI technologies started to find their way into classrooms. One notable example is the development of intelligent tutoring systems (ITS), which aimed to provide personalized instruction to students (*The Evolution of AI in Education: Past, Present, and Future - Teachflow.AI*, 2023).

B. Concept map



What resources are used to help students?

Do these resources make smarter students?

According to Asyia

Kazmi, “AI could help

address the dramatic

learning equity gaps

(Kazmi, 2024).” AI can

help to spread knowledge to more people but not only that, it can create a smarter generation because of the multitude of resources that AI has to offer if used correctly. With AI there is a

“clear opportunity for AI to help educators and administrators lighten workloads, boost productivity, and improve efficiency. (Microsoft Education Team, 2024)”

III. AI Tutoring

- A. Effectiveness of AI tutoring vs Traditional tutoring
- B. AI tutoring access
- C. Student performance

IV. Assessment and Feedback

- A. Student learning and performance
- B. Ai grading
- C. effectiveness of feedback

V. Personal Learning

- A. Tailored help
- B. Learning technologies
- C. Proof of student success

VI. The long-term results of AI use

- A. Intellectual retention: is AI or Traditional learning
- B. Studies of AI assistance across different occupations
- C. Use of AI help in understanding later tasks

VII. Conclusion

In conclusion, artificial intelligence has the power to help or harm our future generations' intelligence. Many resources such as AI tutors and targeted learning allow for material to be taught at and specifically designed for an individual. Studies will show wheter we should use more AI in the classroom or find ways to limit accessibility to this. We need our students to fuel our economy and that starts in the classroom. Is our resource going to boost them up or bring them down?