

AI Writeup Plan by: Sami Mamun, Gwenith Malsom, Luis Fiallos

- Artificial intelligence is a set of technologies that allow machines and computer programs to mimic human intelligence. AI systems learn from experience, identify patterns, and make decisions based on large volumes of data.
- (LLM) stands for large language model, and it is a type of artificial intelligence (AI) program that can recognize text. They are trained on huge sets of data, hence the name “large”.
- (LLM) has been fed with enough examples to be able to interpret and recognize human language or other complex information.
- (LLM) gather all its information from the “internet”
- AI operates by analyzing and learning from massive datasets, enabling it to recognize patterns, draw insights, and make predictions.
- AI models require both quantity and quality of data. The more diverse and well-structured the dataset, the better AI can understand and respond to queries and generate accurate insights. High-quality data leads to more accurate AI outputs. Poor-quality data, on the other hand, can introduce biases and inaccuracies into AI outputs.
- AI models undergo multiple iterations of learning, where data is refined and optimized for accuracy.
- AI assistants from big companies like Google and OpenAI are becoming increasingly intelligent, as the companies scale up their models and train them on larger datasets. They are also getting smart very quickly because companies are implementing new methods called Retrieval Augmented Generation (RAG), which works by giving up-to-date information, and also gives information that is verified and factual, which reduces AI making up information.
- The AI script prompted us to tell us what we should wear for a casual day, and it told us to wear a basic t-shirt, jeans, white shoes, a watch, a tote, or a backpack. The thing that we noticed about this script was how it gave an outfit idea for a basic white man, and how it mentioned to wear a tote bag, and how, outside of Western countries, no one really knows about tote bags, and in many countries, people don't have the fortune to wear shoes; they usually wear sandals or be barefoot. This AI script showed us how the answers AI gives are very westernized and don't take into account other sides of the world, and also how it doesn't give many options. The AI also doesn't even cite the sources, so we don't know where they got the outfit ideas from. AI also doesn't even ask what country we are in, and this matters a lot because in many countries they have a strict dress code, and the AI could prompt clothing wear, but it's not allowed in the country the person is in, and it could get them in trouble.

While AI can be a quick source of information, problems begin to arise when brought into academia. One big problem with AI is that it can encourage plagiarism. If a student just copies and pastes an AI response without putting in their own thinking, they're not actually learning. And also, it is very easy for professors to identify a work that a student didn't do, and they use AI because the language doesn't sound right or doesn't sound like the student, and the professors also use tools that are capable of detecting AI in the work.

Another issue is that it sometimes provides incorrect or outdated information, and if students don't double-check, they might end up using inaccurate facts in their work. Also, there's the risk of students becoming too dependent on AI to do academic assignments.

AI can be really helpful when used the right way. For example, it can act like a tutor explaining a tough math problem or breaking down a reading so students can understand it better. It's also useful for brainstorming ideas, rather than writing the entire paper.

AI can be very useful for summarization. Students can upload sources, and AI will provide a comprehensive summarization. This can save a lot of reading time. Students may also upload their own writing, which AI can summarize. AI can also be used to change the tone of writing. For example, AI can make a piece of writing sound more professional or academic.

AI can be useful for brainstorming ideas for your schoolwork. Students, when working on an assignment at first, are lost or overwhelmed with ideas, which makes it hard for them to start the assignment. They start overthinking, and they are also too scared to ask for help from teachers since they have already explained everything about the assignment, and they also can't ask their classmates because they are busy doing their work, so in that instance, AI would come

to great help by helping with brainstorming ideas and helping them narrow down their ideas. The AI also prompts many different perspectives on the subject and opens their mind to more ideas, and helps them understand the subject of the assignment even more.

An ethical way to use AI in the academic setting could be to utilize the technology to summarize writing. Copying and pasting text, or providing the article name to AI, will provide a summarization of the writing. This can allow students to save reading time. Another ethical practice is using AI to brainstorm and organize ideas. This can help students think creatively without copying the context AI generates.