Limitations of Generative AI and ChatGPT

Generative AI has been a recent revolution in the technical space due to its duality. Often, these generative AI products are used to quickly and sometimes uniquely provide solutions to a given problem. However, there are many critiques of these AI products, because of the often misleading solutions or results they provide. For example, if you ask ChatGPT, "What is the current rate of inflation," it will more than likely return a result that is not accurate—oftentimes due to the recency of a prompt, considering ChatGPT3.5 was trained on up to September 2021 data.

For me, ChatGPT is often a fantastic tool to quickly understand the syntax of an unfamiliar language, i.e. my once minimal JS knowledge, to generate a snippet of code to help me create javascript-html object. In the context of this assignment, ChatGPT is used to generate an entire website with functionality ranging from general page navigation all the way to downloading PDFs to a user's machine. This is where ChatGPT's known flaws start to be glaring.

ChatGPT, BardAI, etc are not people—they will outright tell you that. The LLMs cannot problem solve, only gather relevant solutions to a prompt based on what data it "knows"/was trained on. Additionally, the amount of input and output, the LLMs can take and put out is very limited based on version and whatnot. Moreover, for lab 4, we need ChatGPT to problem solve, which inherently is not possible, however, we can give it super descriptive, small tasks to possibly create relevant solutions.

In order to attempt to bypass these limitations, as previously mentioned, I fed GPT small prompts that were descriptive. Furthermore, after this lab, I understand the rules of GPT much more. Firstly, it cannot access external content, meaning that I had to manually ask it to add text from the ITWS pages. Secondly, it struggled to add certain snippets of code like the navbar to each page—I genuinely do not know why this is the case. Third, the generative images have built-in biases toward certain things, like race and age. When I asked for certain characteristics of the faculty (especially Professor Thilanka) I struggled to give non-stereotypical responses.

All in all, ChatGPT is a great learning tool that can help build an understanding of concepts, however, it has its limitations as an Al model.