

AI Report - CS/IDEA 310

HW 1 - Report by Anna Craze

During the homework 1 assignment, my partner and I used the lab videos, the textbook, and Artificial Intelligence. In terms of the AI that we used, we stuck with using Chat GPT. Chat GPT was especially helpful when we encountered an error message. We were able to copy the error message and enter it into Chat GPT with the text “tell me how to fix this message in Unreal Engine:”. Oftentimes, Chat GPT gave us very clear instructions on how to solve the issue we were having but other times, it did not. Luckily, Irene (my partner) has the premium/pro version of OpenAI and that allows us to be able to import screenshots and images into the AI chatbot and receive more in-depth answers. We were able to take screenshots of our blueprints (specifically the ones we were having issues with) and import them to the chatbox. For example, when encountering an issue with adding blueprints for BP_Damage obstacles: We had originally attempted to add obstacles using the same techniques as lighting pads in class, but we could not get the mesh to react to overlapping with the player character; this was tested with string outputs, which produced no results. We were able to take a screenshot of the BP_Damage blueprint and confided in ChatGPT for help which introduced us to the Take Damage function and had us create collision boxes on top of the meshes. Without ChatGPT, I don’t know if we would have been able to solve this issue. For this issue and similar ones, we had turned to the good old Google search engine to help with our technical problems. However, typing into Google a long question about how to get a solution for something is not a good formula. The Google search engine does a great job handling small, short, and concise questions like “How to create a new folder in Unreal Engine”. Any kind of AI, specifically ChatGPT, is so desirable because it can handle hard, lengthy questions and can even improve answers or hone in on a certain subject just through feedback.

AI is helpful but does not always solve the purpose it needs to. There were many times in this class when I was tempted to use AI to complete certain lab assignments or sections in HW 1 and 2, especially after realizing how easy it is and how compatible it is with working on Unreal Engine blueprints. However, I had to be careful not to rely on AI for every part of my work. Artificial Intelligence has become very popular over the last 2 years and it has become increasingly more common to see students, specifically college students, using it when completing their assignments. And, these students are not just using AI as a tool but rather using AI as a way to do the whole of the work for them which is not going to help our world in the long run. AI is a super beneficial tool but must be used in the right circumstances for it to really be considered beneficial. Considering how Irene and I used it for the Homework #1 assignment, I am a fan of AI and believe that it benefited my work in this class immensely.

HW 2 – Report by Irene Zaugg

We had a lot of issues getting various blueprints to work as expected, and the quickest way to try to resolve those issues was using ChatGPT. Typically, I started with the normal blueprint as described in class, but if it did not work as expected, I could copy and paste a screenshot to ChatGPT for it to help resolve some details. For example, setting the Win Menu caused a significant number of problems and did not work the same way it was described in videos for a 2D display. Instead, ChatGPT provided a more in-depth blueprint that was specific to VR.

Overall, ChatGPT is simply a more efficient way to ask questions than the usual search engines (Google, DuckDuckGo, etc.), so troubleshooting is simply faster. While only one blueprint - an attempt to create a vanishing door using a key - was crafted from the ground-up from ChatGPT, there were quite a few “conversations” trying to fix small bugs or work out non-functioning blueprints.

This is probably the most effective use for LLMs to date: ChatGPT in particular is great at taking a full description of a programming problem and finding a solution. Its ability to process images also makes it much more invaluable than other search tools. Trying to describe the exact problem in Google tends to pull up several dozen websites with specific answers that do not pertain to the exact problem, so LLMs simply save an immense amount of time.

Particular to Unreal Engine, ChatGPT analyzes the Blueprint images nearly flawlessly and returns text versions of any fixes that need to be made. If there are still errors, it responds to the next query in context.

In short, we used ChatGPT as a supplement to many complex problems, some of which were not fully covered in class materials, like creating UI elements in VR.