

This assignment requires you to select one of the topics below and answer it in a short essay (maximum five pages). When necessary, include citations from your survey (e.g., news articles, academic papers, blogs). In this homework, we are divided into two groups based on your last name. If your last starts with [A-M] you are in group A, otherwise you are in group B. For example, Dongyeop "K"ang is group A, and Robert "N"yugen is group B.

This assignment is divided into two groups, each with distinct guidelines for drafting their essays with the aid of ChatGPT:

- For Group B: Begin by consulting ChatGPT to generate an initial essay draft based on the given question. Refine or rewrite this AI-generated draft by incorporating insights you've gained from it, making it more personalized or expanding on the ideas.
- For Group A: Write your initial essay draft independently, without AI assistance. Then, use ChatGPT to help revise and polish your draft.

Instructions for Both Groups: You are encouraged to use ChatGPT in an "open-ended" manner, meaning you have flexibility in how you utilize it for brainstorming, revising, drafting, or organizing thoughts. There is no word/page limit for this assignment, but your response should be thorough enough to represent original responses to the given questions.

Remember, the purpose of this assignment is to explore your unique perspectives on the questions posed. **We value originality, creativity, and personal expression of your final draft.** Important Note: In our database, we already have numerous responses generated by AI. Therefore, essays that resemble these responses in wording, structure, or main ideas may receive a zero. Be mindful to express your own ideas we want to see your authentic voice in the work you submit.

The lead TA for this assignment is James Mooney (moone174@umn.edu). Please communicate with the lead TA via Slack, email, or during office hours. This homework is individual, so don't communicate with your team members.

Questions:

- Q1 [Copyright]. In an era of generative AI, how should content that is generated and/or assisted by AI be claimed as copyright? What can we do to protect writers' and designers' intellectual property?
- Q2 [Education]. How would the classroom look in the future? Do you believe AI will impact and reshape the classroom and education? If you can learn most of what you need from chatGPT or other LLMs, what is the role of teachers? What do you expect students to learn in the classroom?
- Q3 [Professionals] How would future workplaces look like? Has AI contributed to the huge unemployment of professional knowledge workers? Is it possible for expert knowledge processing to be fully automated? Or is human interaction/intervention always necessary?
- Q4 [Risks] As technology progresses, generative AIs such as ChatGPT are expected to improve in accuracy and become more proficient at avoiding undesirable outcomes, including biases and the spread of misinformation. Despite these advancements, what potential drawbacks could still arise from an increased reliance on ChatGPT?
- Q5 [Trust] What conditions would need to be met for you personally to trust an LLM instead of a human expert? How would your answer change if you were deciding whether professionals (e.g. business people, medical professionals, lawyers) should trust LLMs? How about non-professionals?
- Q6 [Creativity] What is the implication of AI generated art and music on human creativity? What will be the new standards for creativity? As large language and visual models become more creative and can mimic humans arts, how can we balance advancing LLMs creativity and the ethics of artistic integrity?
- Q7 [Coherence] As LLMs advance in their capabilities, they are increasingly tasked with generating long-form content such as books and screenplays. Given the challenge of human evaluation for extended contexts, how can we effectively assess the quality of these lengthy generations?

- Q8 [Overreliance] Will there be a time when humans are over-reliant on LLMs? If so, what LLM capacities do you think could lead to this behavior?
- Q9 [Societal Benefit] Is this rapid adoption of LLMs in all aspects of our lives beneficial to society (whether financially, educationally, or in other ways)? Why or why not?
- Q10 [Scaling law] Is there a limit to how advanced models can become through the current paradigm of scaling up model size and training data? Are there any capabilities that might not be served by scaling up?

Deliverables

For this assignment, choose one of the above questions to complete. Keep track of the amount of time you take to complete the AI portion of the assignment vs. the part you are responsible for without AI assistance (you will need to report this as part of your deliverable).

Note that, regardless of group, you are required to return all four of the following for the purposes of this assignment.

- .5 pts **The original draft of the essay** (original). For Group B, this is the ChatGPT generated essay. For Group A, this is your original draft without AI assistance.
- .5 pts **A file containing your conversation with ChatGPT** (conversation). You can download the dialogue in ChatGPT interface.
- 3 pts **The completed draft of the essay** (final). The final draft should be **original** with respect to the chosen prompt and **creatively answer** the given question.
- 1 pt **A discussion of time taken to complete the initial draft, vs. time taken to finish the essay** (discussion). This should include the time itself as well as any hiccups and your perception of how laborious each section felt to complete (i.e. for Group A, was it hard to come up with ideas independently? For Group B, how challenging was it to coax chatGPT to get a reasonable initial draft? What prompts were used that seemed to be very effective for producing a better essay?)

You can submit the following files as a part of submission, following this naming convention: **csci5541-f24-hw6-{FIRST-NAME}-{LAST-NAME}-[A,B]-Q[1-10]-[original,final,conversation,discussion].pdf**. The violation of this format will receive a penalty in your grading.