DMML Ethics Essay

This assignment is intended to help you learn about recent issues in data mining and machine learning, particularly some of the ethical challenges raised by new technological advances. For your assigned topic (e.g., biased data, surveillance, profiling, etc.), you will research it and write an essay.

For this assignment, you will work individually, but you are **required** to use chatGPT *somehow* in the process of writing your essay. (If you don't have an account yet, sign up at https://chat.openai.com/). You may ask chatGPT to provide background information, create an outline, and even write text for your first draft. You must also find at least 4 references; chatGPT will likely not be very helpful here. (Although it is often able to hallucinate fake references, we're looking for real references.) Your final essay should be accurate, polished, not sound like generic chatGPT content, and incorporate material from your references (including citations) while avoiding plagiarism.

Your topic has been assigned separately. The list of all topics is at the end of this document.

Your essay should:

- Be a Google Doc, shared so that **anyone** with the link can **view**. (Note that we will share essays to allow classmates to read and offer feedback on your work.)
- Be 3 pages.
- Be well researched, structured, and written.
- Be accurate. (Watch out for chatGPT hallucinations.)
- Include material from at least 4 references with citations. References should be listed at the end of the essay. You are welcome to use whatever citation style you prefer.
- Focus on your assigned topic.
- Address these questions:
 - O What is the topic?
 - O Why is it important?
 - What are some real-life examples?
 - O Who is impacted?
 - O What role does DMML play in this topic?
 - O What are the main ethics issues?
 - What is your recommendation for how society should think about the topic moving forward?
 - How was chatGPT used in the creation of the essay?

Evaluation

Your essay will be evaluated based on whether it meets the requirements above. You will help evaluate two of your classmates' essays and provide feedback and two of your classmates will help evaluate your essay. This peer feedback will help determine whether your essay completely, nearly, or somewhat meets the requirements. You will have an opportunity to use one of your redo tokens to resubmit your essay if it does not completely meet the requirements.

Submission

Turn in a link to your essay by the due date in Moodle. Make sure to update sharing settings so anyone can view, then copy the link, and paste it into the provided textbox for the Moodle assignment.

Topics

- Exploitation of intellectual property (e.g., in LLMs or image generation)
- Al and job displacement
- Bias (in data, machine learning, AI systems)
- Explainability and transparency (in machine learning models)
- Privacy
- Policing (using Al tools)
- Rising socio-economic inequality (due to AI)
- Safety and accountability of Al systems (e.g., self-driving cars)
- Al vulnerability to hacking/cyber attacks
- Environmental impact of AI
- Al-powered addiction (of apps, games, etc.)
- Targeted advertising (based on algorithms)
- Surveillance (of online activity using AI tools)
- Deepfakes