CS349: Midterm Paper

Topics

For this class, you will write a 10-12 paper on one of the following topics/questions:

1. What are some of the impacts (e.g. health, economic, social, and infrastructural) that software bugs can have on modern society? How can we both reduce the number of bugs and mitigate the negative impact of the ones we don’t catch? Also consider how software bugs are similar and different from “accidents” in other fields such as medical, engineering, or legal. You should discuss a specific case (or set of cases) in addition to citing broader studies to frame your line of reasoning.

2. How have intelligence and/or warfare changed due to technical advancements in the past 30 years? What are some of the impacts (e.g. health, economic, social, and infrastructural) of these advancements, and how should future policies guide these advancements? Also discuss how public perception affects national policy, and what conversations experts in computer science should have with the general public. You should consider a specific case (or set of cases) in addition to broader studies to frame your line of reasoning.

3. What are some of the impacts of the Information Age on our individual and societal relationships to the consumption of goods and services? How has this affected what society considers valuable in a good or service, and what society values in general? Discuss ramifications for the individual, their role in society, and broader impacts (e.g. environmental, wealth distribution, etc). You should consider a specific case (or set of cases) in addition to broader studies to frame your line of reasoning.

Formatting

All essays should be double-spaced in 12pt Times New Roman font. You will include your name and the date at the top of the document followed by the title of the essay. The 10-12 page count does not include references, which should be included in MLA (or any other recognized) format at the end of the paper. You are expected to properly cite all sources.
Style Guide

Write in an academic style (no informalities or colloquialisms). You can assume your audience is technically-minded and vaguely familiar with the topic, but you should not assume they will understand specific terms, references, or know about specific events. Provide brief explanations for any of these things when referencing them.

You may use the first-person when referring to work you have personally done and when expressing your personal ideas. In general, I prefer that you use the singular first-person “I” unless you are referring to group work, but I’ll accept plural first-person “we” references if that’s your preference.

Note that I made the topics/questions quite broad. This is intentional as it allows you freedom and flexibility when choosing how you specifically would like to address the issue. You are allowed (and encouraged) to examine only a small part of the prompt, but you must still take some time in the introduction to explain where your analysis fits into the broader issue.

For all prompts/approaches, your essay must include the following:

1. A high-level overview of the area being discussed and any questions/concerns that your paper will address
2. A thesis statement addressing the prompt in a meaningful, specific way
3. The arguments and counter-arguments related to your stance/explanation and its place in the greater discussion of the issue
4. A conclusion exploring how your analysis contributes to the greater understanding of the issues and/or how it will help others understand the issues

Please always provide evidence using specific examples or studies rather than referring to high-level, general thoughts and ideas. You may include your personal views and opinions, but the paper should make it obvious (either explicitly or from easily inferred context) when something is an opinion versus a fact/common knowledge.