

COSC203 - Ethics Assignment

Due: 29th September, 2023

Grade: 10%

The Essay

Write an essay discussing the ethics of *one* of the following topics. More information for each topic is provided in the sections below.

1. AI Ethics
2. Digital Advertising
3. Data Privacy

Marking

Most of your marks (10%) will be awarded for an in-depth investigation of your selected topic. Correct spelling is worth 1 mark, correct grammar is worth 1 mark, and essay structure is also worth 1 mark.

While you may use spell checkers and other helpful writing tools, it is not acceptable for AI tools (like ChatGPT) to write the essay for you, largely because it creates bland and uninspired writing. We want you to think deeply about your chosen topic and share your thoughts with us.

- Submit a single PDF via BlackBoard.
 - Minimum word count 1,500 (3 pages).
 - Maximum word count 3,000 (6 pages).
- You must provide references for all factual claims.
 - Any referencing style is acceptable (please provide URLs where appropriate).
 - Your own opinions don't *need* references.

Essay Guidance

Below are some resources provided by the University to help with essay writing. Everything from the planning stage to the actual writing.

- [Planning and Writing University Assignments](#) (Chapter 2)
- [A Guide to Essay Writing at Otago](#)

The ACM Code of Ethics

Your essay *should* reference [The ACM Code of Ethics](#). These are a set of ethical guidelines IT professionals are expected to follow. You *could* justify your opinions by referencing specific parts of [The ACM Code of Ethics](#).

1 AI Ethics

In Lecture 13, Lech Szymanski explained how modern AI is awesome, but also it's many concerns. It doesn't think for itself, isn't self-aware or conscious, and isn't responsible for its own decisions. It operates as a black box; the models are often too complex to even understand how decisions are made. Furthermore, it is very data hungry. Training these models demands huge amounts of data, consumes significant power, and frequently provides an incentive to overlook copyright and data privacy issues.

In your essay you should address the topics (or a subset) provided below:

1. **Bias** - does the system work the same for all groups of people?
2. **Transparency** - can we get an explanation of how the decision was reached?
3. **Privacy** - does the input data violate privacy principles?
4. **Control** - are people becoming *over-trusting* AI's decisions?
5. **Liability** who is responsible when things go wrong?
6. **Hallucinations**” generative AI *making*” things up.
7. **Copyright** is AI creating or copying art/text/musc?
8. **Misuse** is it making easy for students to *cheat*?
9. **Environmental factors** how much energy does it take to train AI?

Below are some case studies to consider.

- [ACC use of an AI model to process claims.](#)
- [Artists suing AI companies for stealing their work.](#)
- [Fatal Tesla Autopilot crash.](#)
- [Amazon laid off their hiring team and replaced them with AI. The AI Amazon now uses to hire employees has a gender bias.](#)
- [In 2020, the UK cancelled A-levels exams due to COVID. The AI used determine exam results had a wealth/class bias.](#)
- You are encouraged to find your own resources.

2 Digital Advertising

Internet ads targets people using their personal information. [Watch this video](#) to learn about how Real-Time-Bidding (RTB) facilitates targeted ads. Write about how anyone can gain access to, and use your personal data. You could address the following questions (or a subset):

1. How would a person or company get access to your data?
2. Is it right for your personal data to be freely available on an Ad Exchange?
3. In what ways could your personal data be used to violate your privacy?
4. Do you trust that your data is being used appropriately? (by companies, advertisers, international governments, intelligence agencies, . . .)
5. Who should be responsible for appropriate usage of your personal data?
6. Is society better or worse with no data privacy?

Other resources you could incorporate

- [NY Times article discussing RTB](#)
- [Infographic on the global scale of RTB](#)
- [Article on how governments use personal data to profile citizens](#)
- [Academic paper on the legality of Real-Time Bidding](#)
- Due to legal pressure advertisers must now disclose exactly how they use your personal data. Which resulted in the release of [this data set](#) that describes how users are categorized.
- You may also find your own resources.

3 Data Privacy

For this topic we ask that you investigate the ethics of data privacy in the context of social media.

3.1 Facebook Users

If you are a Facebook user, download all of your data: [Guide here](#). Write about what Facebook knows about you. You could address the following questions (or a subset):

1. How does Facebook organize your personal information? (Provide examples)
2. Where does the information come from, principally? (Provide examples)
3. Is it right that Facebook is able to gather/store all of this information?
4. Do you think the average Facebook user is aware of this data harvesting?
5. Why does Facebook keep your personal data, and how does it use it?
6. Is it right for Facebook to use your data and share it with other companies?

3.2 Non-Facebook users

If you're not on Facebook then read some articles written by users who have downloaded their Facebook data. For instance:

- [Guardian Article 1](#)
- [Guardian Article 2](#)
- [NY Times Article](#)
- You may also find your own articles.

Write about what data Facebook collects. You could address the following questions (or a subset):

1. Summarise the types of data that these users found in their personal profile.
2. What were these users most surprised by?
3. Is it right that Facebook is able to gather/store all of this information?
4. Do you think the average Facebook user is aware of this data harvesting?
5. Why does Facebook keep your personal data, and how does it use it?
6. Is it right for Facebook to use your data and share it with other companies?