



CPSC 2910 – Lesson 6

Ethics

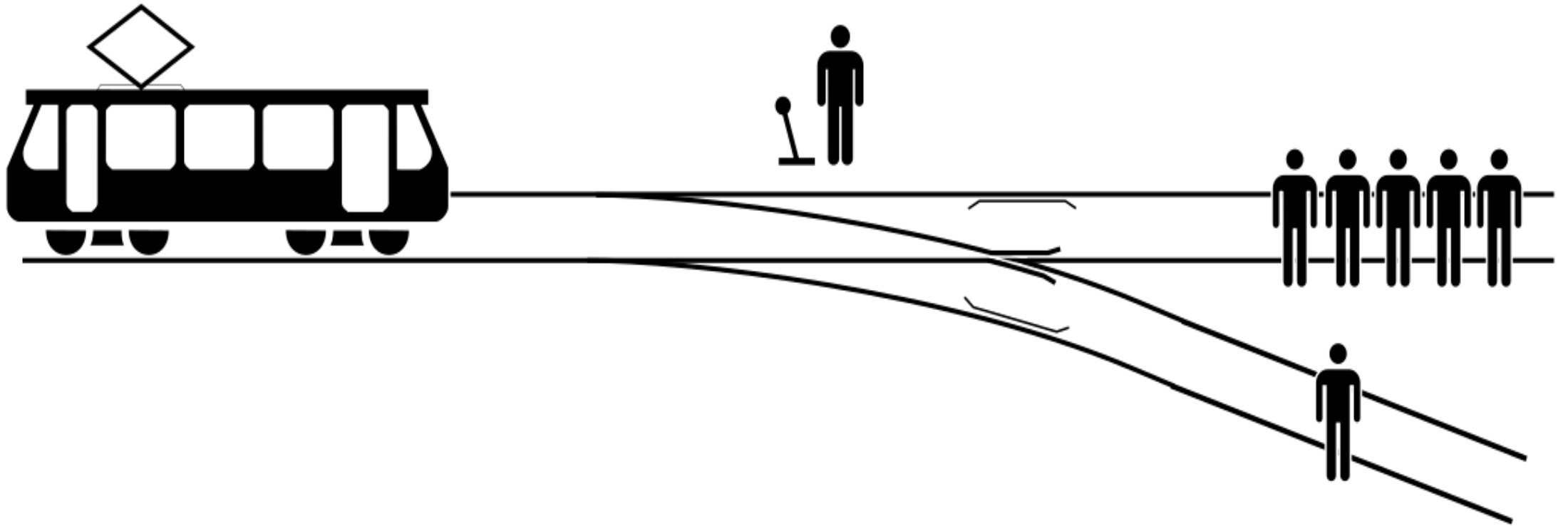
Carrie L Russell | Clemson University, Spring 2023

Agenda

- **Quiz 2**
- **Ethical Frameworks**
- **The Trolley Problem**
- **What are “professional ethics”?**
- **Ethical Guidelines for Computer Professionals**

Moral Dilemma: The Trolley Problem

Teaching AI to solve the Trolley Problem: <https://www.youtube.com/watch?v=181Nj060xMQ>



What are “Ethics”?

Study of what it means to “do the right thing” -

- Assumes people are rational and make free choices
- Rules to follow in our interactions and our actions that affect others

Many ethical viewpoints -

- **Utilitarianism** – what is the overall utility of an act?
- **Natural rights** – life, liberty, and property (John Locke)
- **Negative rights** (liberties) – the right to act without interference; obligation to refrain from harming others
- **Positive rights** (claim-rights) – an obligation of some people to provide certain things for others; obligation to actively do good
- **Golden rules** – treat others as you wish to be treated

Ethical Views: Important Distinctions

Ethical viewpoint distinctions -

- Right, wrong, and okay
- Distinguishing wrong and harm
- Personal preference and ethics
- Law and ethics

What else can you think of?

What are “Professional Ethics”?

Professional ethics -

- Includes relationships with and responsibilities toward customers, clients, coworkers, employees, employers, others who use one’s products and services, and others whom they affect

A professional has a responsibility to act ethically -

- Many professions have a code of ethics that professionals are expected to abide by
- Medical doctors, lawyers and judges, accountants, etc.

Ethical Guidelines for Comp Professionals

ACM Code of Ethics and Professional Conduct guidelines –

- <https://www.acm.org/code-of-ethics>
- Also available on Canvas
- General ethical principles, professional responsibilities, professional leadership principles

Do you have any concerns/disagreements with the ACM Code of Ethics and Professional Conduct guidelines?

Discussion Topic 1

Using the ACM Code of Ethics and Professional Conduct as a guideline, answer the following –

You are the president of a small computer game company. Your company has just bought another small game company that was developing three new games. You find that one is complete and ready to sell. It is very violent and demeaning to women. It would probably sell a few million copies. You have to decide what to do with the game. Give some options, and give arguments for and against them. What will you do? Why?

Discussion Topic 2

Using the ACM Code of Ethics and Professional Conduct as a guideline, answer the following –

It is early December. You are the manager of the IT department of a large retail chain, and you are ready to switch all the stores in the chain to a new system for processing customer credit card payments. The new system should be quicker and more secure. Give reasons for and against installing it now rather than waiting until after the holiday season.

Discussion Topic 3

Using the ACM Code of Ethics and Professional Conduct as a guideline, answer the following –

You are a high-level manager at an automobile company. You must decide whether to approve a proposed project to add a screen on the control panel, on which the front-seat passenger will have full internet access. The driver would not be able to see the screen easily or well from the driver's seat. What are the issues? Make a decision and explain it.

Discussion Topic 4

Using the ACM Code of Ethics and Professional Conduct as a guideline, answer the following –

Which do you think is less risky: developing fair software for sentencing criminals or developing safe software for self-driving cars? Which would you be more comfortable working on? Why?

Discussion Topic 5

Using the ACM Code of Ethics and Professional Conduct as a guideline, answer the following –

You are an experienced programmer working on part of a project that involves processing data from wearable fitness devices. You have figured out that you can do a part of your section of the program in a way that is more efficient than the method described in the specifications. You are confident that your method is correct, and you know that the change will have no impact on other parts of the program. You understand the importance of following specifications, but you also know that any proposed revision generates a long, bureaucratic process that will take weeks and require approvals from many people in both your company and the client company. Is this a case where the trade-offs make it reasonable to use the better method without a revision of the specifications? Explain your response.

In-Class Teamwork

As a team – answer this week’s discussion post in Canvas

Computer Professionals – Code of Ethics –

- You will work together in class to complete the online discussion post - due end of class.
- Individual responses to other posts due midnight before next week’s class.

Reading and Discussion Rubric-Sp22		
Criteria	Ratings	Pts
Provided thoughtful answer to the specified question. Showed thought and reflection in their answer. Referenced key elements of the article to back up their answer.	This area will be used by the assessor to leave comments related to this criterion.	12.5 pts
Commented on at least 2 classmate answers. Provided a thoughtful response either supporting or challenging an answer provided by two of their classmates answers.	This area will be used by the assessor to leave comments related to this criterion.	5 pts
No major grammar or spelling issues in the submission. Shows an attention to detail by ensuring that the grammar and spelling are correct in their submission.	This area will be used by the assessor to leave comments related to this criterion.	2.5 pts
Total Points: 20		

Looking Ahead

Next week -

- Reading and Online Discussion –
<https://news.harvard.edu/gazette/story/2020/10/ethical-concerns-mount-as-ai-takes-bigger-decision-making-role/>
- Be prepared to discuss as a class and in small groups next week. You will work together in class to complete the online discussion post, so it is important that you **READ AHEAD.**
- In-class presentation on AI and Bias – Team 2 (benefits) and Team 11 (harms)
- In-class quiz on this week's topics

Questions?

Use our Teams channel first – this is preferred for general questions!

- Prof Russell - crusse4@clemson.edu
- Matt Bernard - mberna2@clemson.edu