

Class Activity: Examining ethics of self-driving cars

Part 1: The Moral Machine

Engineering Canons - Review the NSPE Code of Ethics Fundamental Canons:

- I. Hold paramount the safety, health, and welfare of the public.
- II. Perform services only in areas of their competence.
- III. Issue public statements only in an objective and truthful manner.
- IV. Act for each employer or client as faithful agents or trustees.
- V. Avoid deceptive acts.
- VI. Conduct themselves honorably, responsibly, ethically, and lawfully to enhance the honor, reputation, and usefulness of the profession.

MIT Moral Machine - Complete this in your group. You will need only one computer.

1. Go to www.moralmachine.net.
2. Complete the given 13 scenarios in the "Judge" mode. (Select "Judge" at the top of the page)
3. For each scenario,
 - a. Discuss the options as a group before making a decision
 - b. As a group, choose an option and fill in the table below.

Scenario	Option Chosen	Reasoning	Canon (above)

4. After completing the scenarios, review your results in the "Results" section. Summarize key 'take-aways' below

Group Discussion:

Which scenario did you group find most challenging & why?

Which canons were most frequently applied?

Were there any conflicts that arose?

Part 2: You Decide:

Scenario: You are the lead engineer on an autonomous vehicle project. Your team has developed an AI system that is significantly safer than human drivers in most situations. However, you've discovered that in very rare circumstances (less than 0.1% of potential accidents), the AI makes decisions that prioritize the vehicle's occupants over pedestrians, potentially leading to more overall casualties than a human driver might cause in the same situation.

As a group, you must decide whether to:

A	B
Delay the launch to reprogram the AI, potentially saving more lives in these rare cases but postponing the overall safety benefits of the system for millions of users.	Launch the system as is, knowing it will immediately start saving lives in most situations, but accepting the ethical burden of the rare cases where it may cause more harm.

Factors to consider: overall public safety, ethical responsibility, transparency, public perception, and the role of engineers in society.

- Your choice (A) or (B): _____
- The main reasons for your choice
- The key ethical principles or considerations that influenced your decision
- Any disagreements within your group? If so, how did you resolved them (if at all)
- One potential consequence of your decision that concerns your group