Empathy and Ethics in Engineering Education: A Paradigm Shift for a Human-Centered Future
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Case Study 1: Privacy Concerns in AI-Powered Surveillance

The city of São Paulo has implemented AI-powered facial recognition systems in public spaces to improve security and identify potential threats. However, concerns have been raised about privacy violations, especially in low-income neighborhoods where surveillance is more intense. *How should engineers balance public safety with the citizens' right to privacy*?

Discussion Questions:

Identifying Stakeholders:
Who are the key stakeholders affected by this decision?
What are the potential impacts (positive and negative) on each stakeholder group?
Balancing Competing Values:
What ethical principles (e.g., privacy, safety, fairness, environmental stewardship) are in conflict in this situation?
How should engineers prioritize these competing values?
Evaluating Responsibilities:
What responsibilities do engineers have to society, the environment, and their employers in this case?
Are there legal, social, or professional obligations that should guide the decision-making process?
Considering Long-Term Consequences:
What are the potential long-term consequences if the engineers proceed with this project as planned?
Could the decision set a precedent for future projects? What might that mean for society?
Exploring Alternative Solutions:
Are there alternative solutions that could mitigate some of the ethical concerns?
What compromises or adjustments could be made to balance stakeholder interests more effectively?
Reflecting on Cultural and Contextual Factors:
How might cultural values in Brazil influence the perception of this ethical dilemma?
Are there specific environmental, social, or economic factors unique to Brazil that should be considered?
Evaluating Transparency and Communication:
How transparent should engineers be about the risks, limitations, or biases in their technology?
What role does public input or consent play in ethical decision-making for these projects?
Learning from Similar Cases:
Can you think of similar cases or examples from other countries or industries? How were they handled?
What lessons can be applied to this situation?

- ❑ What are the ethical issues involved?
- ❑ How might empathy influence the decision-making process in this case?
- ❑ How could educators prepare students to navigate such dilemmas?