Ethics Portfolio

Ethics Presentation slides by Oluwatoyin Jolaoso.

Press Space for next page →

Table of content

Introduction

My name is Oluwatoyin Jolaoso, and I am a graduate student in the Geomatics department at the University of Calgary. As an engineer, I am passionate about creating innovative solutions for everyday problems. I find great joy in breaking down complex issues into manageable parts, allowing me to see the bigger picture and develop effective solutions.Professionally, I have experience as a software engineer and an account manager. In this field it has made it easy to bring my ideas into realization faster. A notable success in my career has been successfully transitioning into the tech industry. Initially daunting, this journey taught me resilience and adaptability. As I often say in Pidgin English, 'everybody go dey alright las las'—meaning that things may seem uncertain at first, but they will work out in the end.

Engineering and Ethics and Responsibility

Taking ENGG 687 has significantly broadened my understanding of ethics, particularly in the context of engineering. Prior to this course, I had a general grasp of ethics, but I now appreciate the nuances and specific applications within the engineering profession. My biggest takeaway from ENGG 687 has been the importance of considering ethical implications in engineering design, especially the concepts of 'design for ethics' and 'design for equity'. I've learned to differentiate between equality and equity, understanding that equitable solutions often require tailored approaches rather than one-size-fits-all solutions. For instance, in resource distribution, equity means allocating based on need rather than equally dividing resources. As I move forward in my career, I plan to integrate these learnings in several ways: I will keep the APEGA principles at the forefront of my practice, using them as a guide for ethical decision-making. When approaching design challenges, I'll consider not just the technical aspects but also the ethical implications and how to ensure equitable outcomes. I'll strive to maintain awareness of the broader societal impacts of engineering work, considering diverse perspectives and needs. In team settings, I'll advocate for ethical considerations to be part of our standard process, encouraging discussions about the ethical dimensions of our projects. I commit to ongoing learning and reflection on ethical issues in engineering, recognizing that ethical challenges evolve with technological advancements. This course has instilled in me a deeper sense of professional responsibility. I now see that as engineers, we have a duty not just to create functional solutions, but to ensure those solutions are ethically sound and contribute positively to society. This perspective will be integral to my approach to engineering throughout my career."

Learnings in ENGG 687

"Throughout this course, I've gained numerous insights that have reshaped my perspective on engineering ethics. The most surprising and interesting aspect I learned was the concept of holistic thinking in engineering decisions, particularly considering the broader impact on humanity rather than just personal or immediate benefits. One of the most impactful learnings was about uncertainty in decision-making, especially the concept of Epistemic uncertainty. This challenged my previous approach of accepting tasks without fully acknowledging my competence level. I've learned the importance of transparency regarding my skills and the potential uncertainties in project delivery. To extend my learning beyond the classroom, I've been actively applying these principles in my life over the past three weeks. For instance, I'm now more transparent about my capabilities when approached with new tasks, which aligns with APEGA's Rule 2 about undertaking only work that one is competent to perform. The concept that challenged my thinking the most was the ethical dilemma of accepting projects that stretch beyond one's current competencies. While I understand the importance of only undertaking work I'm competent in, I still grapple with the idea that accepting challenging projects with the intention to learn and grow might be morally justifiable. This creates a gray area, especially

Course Reading One

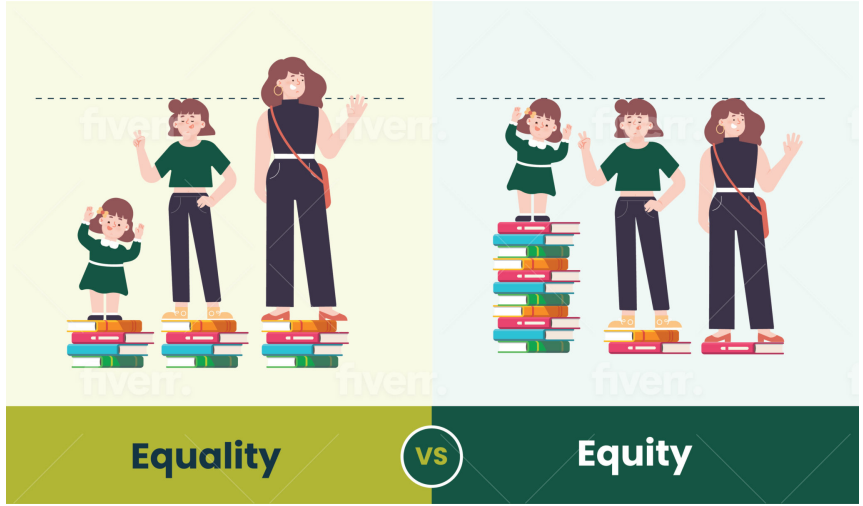
Image by Futerra

- An investigation was done on IKEA's sourcing practices and this lead to a troubling issue between the company's sustainability claims and its actual practices, one regarding illegal logging in protected Siberian forests.
- IKEA despite marketing itself as a leader in sustainable furniture, having been linked to sourcing it timber linked to significant environmental violations, including logging in areas critical for climate regulation.
- This discrepancy between IKEA's perceived public image of sustainability and its actual practices is an example of greenwashing,
- Greenwashing was taught during lecture 7 on October 12 .

Source

Course Reading Two

- One interesting point was Jake Sticca's question about whether it's beneficial to code anything as masculine or feminine, as this creates a hierarchy. This made me think differently about how we might unconsciously gender certain aspects of engineering work or roles, potentially limiting opportunities or creating biases.
- The biggest takeaway for engineers is the importance of actively promoting gender equality and challenging traditional gender norms in the workplace. This not only benefits individual engineers but also leads to better business results, more innovation, and positive societal impacts.
- Design was taught during the Design for equity class.



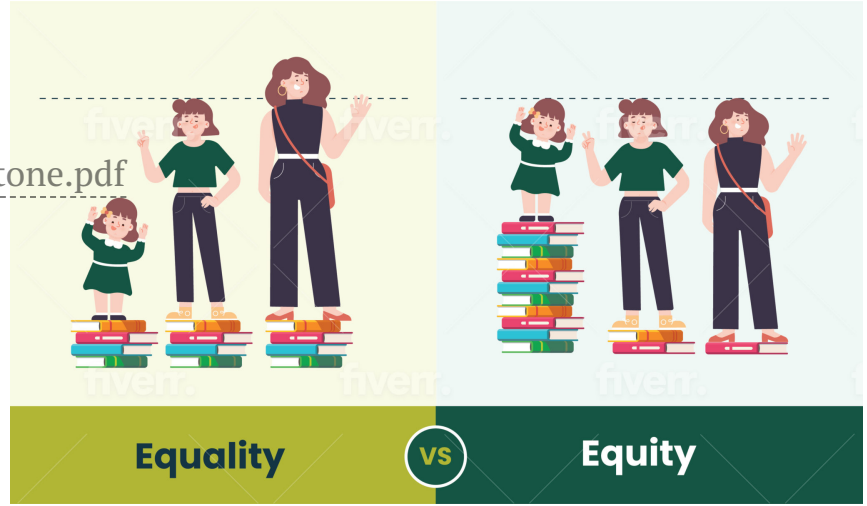
Source

Additional Materials

Design for safety lecture
https://www.stern.nyu.edu/om/faculty/zemel/ford_firestone.pdf

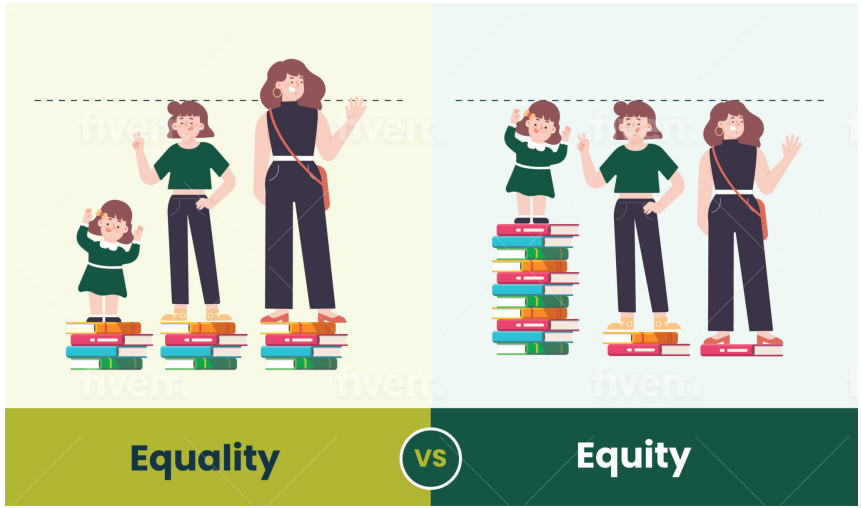
1. The Ford-Firestone tire case shows how important safety is in engineering. This focuses on how the importance of small design choices, like tire pressure recommendations, can lead to tragic outcomes when safety is not taken seriously.

Engineers have a moral duty to rigorously test their products, especially when people's lives are involved in the use process. What is also surprising is how both Ford and Firestone initially tried to shift the blame onto each other, which highlights the need for transparency and accountability in the industry clearly, where both company employees failed in APEGA rule 3 which states that engineers shall be honest and fair in their professional activities.



Source

Additional Materials Two



Source

Brief Summary: Facebook conducted a psychological experiment on nearly 700,000 users without their explicit consent. The study manipulated users' news feeds to show more positive or negative content to see how it affected their own posts. This raised significant ethical concerns about informed consent in digital research and the potential psychological impact on unwitting participants. Reflection: This case study highlights critical ethical issues in engineering and technology design, particularly regarding user safety and consent. As engineers, we have a responsibility to consider the potential consequences of our designs and experiments on users' wellbeing. The Facebook study demonstrates how even seemingly minor manipulations of user experiences can have far-reaching ethical implications. The incident raises questions about the boundaries of ethical research in the digital age and the responsibility of tech companies to their users. It challenges us to consider how we can balance the pursuit of knowledge and

Teamwork Suggested Materials

Biggest Takeaway The most significant lesson I learned from the project process and teamwork is the importance of diverse approaches and open-mindedness. I realized that while team members may share a common goal, their methods to achieve it can vary significantly. This diversity in approach can be a strength when properly harnessed. Summary of Learnings Diverse Problem-Solving: Each team member brings a unique perspective to problem-solving. Active Listening: The importance of listening to and considering all ideas, not just asserting one's own. Role of Accountability: Having a designated person to follow up on tasks and deadlines is crucial for project success. Overcoming Preconceptions: Initial impressions of team members' capabilities can be misleading. Surprising Aspects The most surprising aspect was discovering that the quietest team member was often the first to complete their tasks. This experience taught me not to judge team members' capabilities based on their verbal participation alone. I learned that factors like language barriers can influence a person's communication style without affecting their work quality or commitment. Hardest Part of the Process The most challenging aspect was coordinating schedules for team discussions. With diverse schedules and commitments, finding a time that suited everyone required compromise and flexibility from all team members. Most Rewarding Part The most satisfying aspect of the project was seeing our collective efforts result in good grades for all assignments. This outcome validated our teamwork and individual contributions, demonstrating that despite challenges, we could achieve success through collaboration. Reflection This project experience has reinforced the value of diversity in teamwork. It has taught me to appreciate different working styles and communication methods. Moving forward, I will strive to create an inclusive team environment that accommodates various strengths and working preferences. I've learned that effective project management isn't

Reflection and looking back

During the Design for Justice reflection in Quiz 8, I wrote:

> "Designing a public building, gathering input from the community that would benefit from this can lead to more functional and accepted design."

Upon revisiting this statement, I've realized that my perspective has evolved. While community input remains crucial, I now recognize that it's not the sole factor in successful design. This reflection has prompted me to consider the complexity of design processes more deeply.

I've come to understand that while user input is valuable, it must be balanced with professional expertise. For instance, being a frequent train user doesn't necessarily qualify someone to provide the best advice on train design or construction. This realization underscores the importance of integrating diverse perspectives – both from users and experts – in ethical engineering practices.

In Reflection Quiz 5, I stated:

> "One small goal I could set for myself in the next week to bring a little balance to my wellness wheel is to dedicate some time to improving my financial wellness."

Fun Fact about me

I love to go hiking on the trail during summer, One fun fact about me I know can type over 105 words per minute, with a 98% success rate without any error. I also know over 500 fun facts about human and animals.

I also can type with my close and just listening to the audio of a