Ethics Assignment

As a team, discuss situations you can remember (find, identify) in which a software system (program, component, deployment of some service) was created and demonstrates some behavior that you consider unethical. Explain how your example is problematic. Discuss why it seems unethical, and discuss if the problem is the software engineer(s) behavior, or the functions being performed by the software... perhaps both. Also the problematic aspect of your situation might not fit into this division... engineer vs. product behavior.

Institutional Racism in AI

Institutional racism in AI is unethical because it favors certain groups of people over others. A good example of this is facial recognition technology, which has a ton of practical implementations now. It's used to unlock phones, verify purchases, and for more serious matters like law enforcement. Studies have shown that facial recognition is the least accurate among Black women, with error rates of around 30% when compared to white men. The error here comes from the engineers, and their lack of consideration of this before it was released to the public. The developers didn't collect enough data about specific demographics for this tool to be able to distinguish between those people accurately, and this wasn't considered until after the facial recognition software was released for public use. Facial recognition has the most margin of error with darker-skinned people, which can lead to them being falsely matched with mugshot images, and incorrectly charged with crimes they didn't commit. This is a huge ethical issue, which highlights the need for more diversity in software development, and for much more consideration of the implications of new technology before it's released to the public.

Source: Racial Discrimination in Face Recognition Technology

Privacy Concerns (Data Collection by Corporations)

Corporations collecting data about consumers and users without informed consent is a huge ethical violation. In the US, privacy laws are nowhere near being caught up to the current state of data collection. Companies are allowed to share or sell data without the person's knowledge and don't necessarily have to notify someone if their data is breached. This is a huge violation of the user's privacy. This is partially a legal issue but is also a fault of the developers. Companies building software that collects user data should be completely transparent about what data they collect, what it's used for, and a way for the user to opt into or out of sharing unnecessary data. If there is a data breach, all users should promptly be notified, and be informed of recommended next steps to protect their data. This issue comes from companies that prioritize profit over their users' privacy, which is incredibly unethical and needs to change.

Source: The State of Consumer Data Privacy Laws in the US (And Why It Matters)

Self-Driving Cars

Self-driving cars present a number of ethical dilemmas. Some of these issues include the aforementioned data collection, and the implications already outlined. Other implications, though, involve the decisions the car makes in certain situations. Inevitably, these cars are going to get into car accidents. If a self-driving car gets into an accident and kills someone, who is at fault? The driver for putting the car into self-driving mode, the company who allowed the car to be on the road, or the developers that made the car make that decision? How does a team of software engineers decide the ethical code of a machine like this? A car that prioritizes the driver might make split-second decisions that a person might handle differently. Humans have emotional reactions and operate instinctually in order to avoid danger. A machine lacks this and has the ability to have a pre-programmed response, which means it has the ability to react to danger more rationally than a human can. However, since this can easily result in someone dying or getting seriously injured, it's tough to decide whether it's even ethical to put these cars on the road in the first place. This isn't as much of an issue with the developers, as it is an issue with the tasks the software is supposed to be able to complete.

Source: Driverless Cars And AI Ethics