

According to the Oxford Dictionary, the definition of ethics is the moral principles that govern a person's behavior or the conducting of an activity. IEEE defines ethics in their Code of Ethics; these outline numerous "rules" that electrical and electronics engineers should follow. To highlight a few, 1) to hold paramount the safety, health, and welfare of the public, to strive to comply with the ethical design and sustainable development practices, and to disclose promptly factors that might endanger the public or the environment, 2) to improve the understanding by individuals and society of the capabilities and societal implications of conventional and emerging technologies, including intelligent systems, and 3) to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others.

Everyday people and companies are faced with ethical issues. Whether it be the simple task of getting to class or work on time to fulfill the responsibility one may have to their parents or families, or major problems like the collection of user data for a product without direct and clear consent of the user. Presumably having a code of ethics like the one IEEE provides helps companies and people make choices that are for the public good, but that begs the question: what does "for the public good" mean? To some, it may simply be exactly that: make decisions that in the long term benefit the vast majority of people that will be affected by that decision, like transitioning to renewable energy to slow climate change, or not releasing an un-finished product that could hurt its users. To others, "for the public good" may mean that in the worst sense: make decisions based on what's good for shareholders, the bottom line, only your user base. It's relatively clear which organizations, companies, or individuals fall follow which meaning of the

phrase, and therefore there must be a continuing discussion on how to define ethics in the industry and how to handle those who are only pretending to follow along.

In class, there was a discussion on how back in the 70s, Ford released a line of cars that were prone to catching fire when rear-ended because Ford “didn’t feel like” spending the extra money to ensure the rear bumper was more than a piece of metal. We all stated pretty quickly on how that of course was wrong to make a product that could potentially kill its users that easily when the industry standard was to make cars that all the safety precautions necessary, and that is was appalling that Ford went so far as to compare the cost of making the vehicle safer versus covering the cost of a driver dying due to its design flaw.

When comparing Ford’s actions to the Virtue Ethics, its clear which ones apply. Honesty comes to mind right away; Ford wasn’t honest with the public outright that that line of cars wasn’t built with the same safety standards in mind as the rest of its and the industry’s vehicles. Responsibility is another big one; Ford wasn’t taking the responsibility of keeping people safe on the road seriously when producing this line of vehicles. Finally, Ford didn’t have the same integrity, wasn’t asking itself if in the long run, putting people’s lives at risk was worth more than meeting a budget constraint. All three of these Virtues revolve around the ideas that for a corporation or individual to be a cultural leader, they have to 1) take responsibility for their actions, 2) be honest when they make mistakes and formulate a plan to correct their mistakes, and 3) Judge themselves based on the cultural needs and standards of the time; ask if what they are doing is right in the general publics eye, and if what they are doing is sustainable. One Virtue I would create to compare Ford to is sustainability. If Ford kept producing cars that were prone to catching fire when rear-ended, or broke easily, or weren’t safe all around, Ford probably

wouldn't be around today; their actions wouldn't have been sustainable. Not to mention the environmental impact of hundreds of cars wasting fuel like that.

In class, we also discussed the issue of smart home devices like assistants always listening and recording conversations when not prompted, and the companies that developed these products using that data without users' clear consent to target ads and other information towards them. We agreed that it was wrong for a company to collect this kind of sensitive data without consent, but we understood why a company would want to do this: to improve the voice recognition in these types of products and make more money off the users to buy it.

Outside of school and class, there is one ethical situation that comes to mind that I had a key part in. During an internship I was the lead developer in making a web application to help out the sales team fill out numerous paper applications, quotes, etc with clients. This job was mainly to digitize all the forms that a client may need to fill out when subscribing to a service. As a part in this application, a client had the ability to fill out forms without a sales rep being with them to get a summary of pricing. This required them to input potentially sensitive information like a federal tax ID, tax status, names of people working at the company, addresses, and phone numbers. This could also reveal sensitive information to the company I was working at, especially pricing which competitors could look at and potentially undercut our company. At first, in order to identify a client to associate the forms to in the database, my manager just wanted me to require that they input their billing address. This was problematic for me because having the only identification for a web form that contains potentially sensitive information for that client be a public address was dangerous. Dangerous for the client, for their company, and for the people working at that company. I brought this up to my manager, and eventually we settled on yes, identifying a client with their billing address, but, remove sensitive information on

the backend so information isn't even sent to the web form. I was still not a fan of this, so I created a way to identify a user with a username and password if the manager ever changed their mind and wanted to use that system to identify a client.

At the end of the day, the conversations about ethics and ethical actions are not determined by a code of ethics or a "virtue of ethics." The conversation we all should be having is one about the public culture towards companies and individuals who are not acting in our best interests; one about how we, as a whole, should respond to such acts of dishonesty. That's what needs to happen and that's what's beginning to happen to enact real change. We can see from the numerous Facebook scandals that the public doesn't take being lied to very quietly. With movements like #deletefacebook, it's beginning to be clear to companies who aren't being ethical to the culture's standard.