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Ethics Essay

Ethics in engineering seems like the last thing that’s focused on in classes where you’re trying to cram as much knowledge in your head as quickly as possible. Despite the lack of focus, ethics are extremely important in the professional world because as engineers, what we do is directly used by other people. This means that design decisions made for the wrong reason, like prioritizing hitting a deadline to making a change that can protect users. It’s not always a black and white decision as to what crosses an ethical line, which makes it important to have a code of ethics. Operating within the same framework of right and wrong throughout an engineer’s career will make it easier not to cave into making unethical decisions. Engineers should share their principals too because as we learned through our discussions with professors on ethics, many times it’s a gray area many times.

I myself have a code of ethics that I use both in my academic and professional engineering life. In academia this includes obvious tenets such as not copying any of my work from other sources. In more minor ways, I have to make decisions regarding how I help people with assignments when they ask for it. In these situations, I only give help if it’s allowed in the class and I employ my skills learned being a teaching assistant to help the person reach the conclusion themselves, gently pushing them in the right direction. In my professional life, my main ethical concerns are making sure that the customers are properly notified of anything happening on their account and when they have problems, that they have to pay as little as possible to get it back to us. It’s these principles that help me make decisions like if I should push back with my manager to alter the goal of a piece of code to be more beneficial for the customer.

Despite my own set of ethical rules for my life, I learned a lot discussing ethics with Dr. Neihart as it related to the Ford Pinto. The Pinto was an affordable car that was released even though it did not pass their internal tests and ended up killing several people even though the issue could have been resolved with an $11 addition. It was an interesting topic because there were a lot of irregularities and missing information in the article. This led to a lot of debate on what the actual facts could be. For example, they seemed to know it was wrong because it passed their tests, but did they just think their bar (didn’t have a regulation) was high enough? They may not have been aware that the design decision was unsafe even though it turned out to be pretty deadly. We couldn’t really pin down a great definition for what mix of intent and action leads to a truly unethical decision. There are a lot of factors involved and that makes sense, we also discussed how ethical decisions change over time.

One of the most interesting aspects for me was when we discussed accountability. Someone suggested that there be an investigation in to the incident with the Pinto and fire everyone involved. It’s a great answer, but we debated a lot about if that would actually prevent the issue from happening again. You can’t always bet it’s a few bad actors, sometimes it may be the culture of the company that’s toxic and leads to unethical decisions. But we also weren’t totally satisfied with the solution of fining the company. At the end we chalked it up to be a philosophical debate. I personally suggested that regulation is the best way to fix these issues, because that applies to the industry. In the case of bad actors, they’re going to be relegated to the same standards no matter what company they’re in, and the companies obviously have a high incentive not to violate the regulations for fear of action by the government.

In the case study of the Ford Pinto, the ethical virtue that is most relevant for me is self-discipline. This is because one of the starkest mistakes that Ford made was not adhering to their own testing standards and instead working all the way up the chain of command to get the car approved anyways. If they would have had the self-discipline to adhere to their own testing standards than the issues with the Pinto that ended up killing people could have been avoided. Somewhat similar to this is integrity because it seems like Ford prioritized profitability over the safety of their customers. In the court proceedings their argument as to why they didn’t make the $11 fix to make the Pinto safe was because the costs of the human lives and cars lost were less than the aggregate cost of making that change. While that may be true from a number’s standpoint, the view that safety can be compromised for profitability seriously lacks integrity. The third virtue which relates most strongly to the case study is responsibility because cars are some of the most dangerous products that people use everyday and they should be safe. The fact that Ford apparently had an unwillingness to adhere to the responsibility of their industry by intentionally making the Pinto less safe than it could be is a serious violation of this virtue. Of the 6, I don’t think honesty is something that Ford didn’t adhere to. In the case study, they were up front that they knew there was a problem but simply didn’t think it was enough of a problem to solve it.

Ethics is a topic that often takes a back seat to technical knowledge but is nonetheless a very important part of engineering. As I finish my college career, I’ll be going into the world building products that affects people’s daily lives. As such, I need to constantly be aware of ethical concerns and any possible breaches. Even though it seems easy, it is apparent from the discussion about the ethics of the Ford Pinto incident that ethical decisions are not always black and white. Throughout my professional career I hope to strengthen my own sense of ethical responsibility through constant feedback and observation of colleagues and the industry.