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Ethics Essay

Ethics is one of the most important principles in the engineering profession. Different engineering disciplines have varying standards and codes; electrical, computer, and software engineers have the IEEE Code of Ethics. The IEEE Code of Ethics stands to ensure that engineers in the field make ethical decisions because as engineers, the products and work we do can actually affect the public's lives and safety. It is our duty to abide by the code of ethics and to always make ethical decisions. The code of ethics outlines what is and what is not deemed ethical in the profession. For example, two of the principles of the IEEE Code of Ethics are "to be honest and realistic in stating claims or estimates based on available data" and "to reject bribery in all its forms." The IEEE Code of Ethics is an important resource for engineers when determining the ethicalness of a situation.

When I am faced with an ethical dilemma, the first thing I do is to get all the possible information available and generate possible solutions to the problem. Then I spend some time evaluating potential solutions to determine which one is not only the best solution to the problem, but also the most ethical one. If I do not feel comfortable with a solution or its consequences, it is likely unethical. But ultimately, when determining a situation is unethical, it is best to speak up about it. For example, there was one time in a software project where I did not think that a particular bug was ethical to allow in the upcoming software release, so I told the

project manager what I thought. For engineers, a good rule of thumb when faced with an ethical decision is to consult a mentor or the IEEE Code of Ethics to see if it violates a principle.

One major ethical issue that we discussed as a class during our meeting was the mass collection of data on users. This could be anything from the Hy-Vee Fuel Saver program to the Facebook monitoring your history to place directed ads on your Facebook feed. My class was not fully able to come to a consensus on what the most “ethical” decision would be for many reasons. For one, users are often notified in their Terms of Service and Agreement forms that they agree to that data is being collected on them; however, many people are not aware of this. So, even though people “agree” to being monitored, they did not really. The Hy-Vee Fuel Saver collects your shopping history to predict what may be successful sales for different stores. So, this kind of data collection helps the customer in a way. But many other companies like Google are collecting massive data sets on their users and are not fully disclosing why. Google collects users’ location history with Google Maps and places catered ads based on a user’s search history. My class thought these were unethical practices, but some said it was still okay because customers agree to it when they sign up for the apps or services. Our discussion leader, Dr. Doug Jacobson, believed this type of behavior was also unethical. I think people that think it’s ethical because it’s become the new norm in society, many companies collect user data in large quantities. Overall, I think the mass collection of data on users is unethical when the company is not upfront about it and the purpose is not clear.

The three Virtue Ethics that pertain to our ethical situation are integrity, honesty, and responsibility. Integrity is the “moral uprightness and being of strong moral principle and ethics, as well as exercising good and ethical judgement in your field of practice.” I chose this principle

because integrity is all about doing the right thing. This connects back the collection of user data because there is not an easy answer to the question of whether or not it is right thing to do, and certainly not in every situation. The next principle is honesty which is “truthfulness, fairness, sincerity, and openness.” This principle relates back to our case study because companies are not always open about the amount and types of data they collect on their users, which is not entirely honest on their parts. The final principle I chose was responsibility. “Responsibility is the accountability, trustworthiness, dependability, reliability, and recognizing a personal and moral obligation to act for the good of others.” Responsibility is relevant to our case study because the actions of some companies are not responsible, and they do not act for the good of others. The other ethical virtues, fidelity, charity, and self-discipline, are less relevant to the case study because they are more focused on the self and our own actions, rather than justifying the behavior of an industry. I think another ethical principle that could be included in the case study is social good and whether or not the actions are the best for society. Overall, ethics are an extremely important part of the engineering profession.