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### Software and Ethics

Technology and software have solidified its position as an essential crutch to civilization. Almost everything we encounter daily has been touched by the modern technology and information era. As a student with ambitions to have a lifelong career in the field of technology and software I'm certain that ethical dilemmas will at some point become a factor to contend with. I am personally concerned with the ethical dilemma of privacy; I believe this issue to be at the forefront of many modern issues and I'm certain I'll encounter it at some point.

Two major tech/computing organizations that have published ethical guidelines to abide by are the IEEE and ACM. The IEEE code of ethics covers a broader scope and is more generalized. The ACM, however, focuses mostly on computing, having more specific ethical guidelines. These organizations state the following about ethical dilemmas of privacy and discrimination; The 7.8 IEEE Code of Ethics line 8 states "to treat fairly all persons and to not engage in acts of discrimination based on race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;"(ieee.org). The ACM General Ethical Principles item 1.6 simply states "Respect Privacy" alongside item 1.4 "Be fair and take action not to discriminate. (acm.org).

The issue of privacy is constantly in the news for either direct ethical violations of privacy or negligent management of users' information. Facebook has been investigated multiple times for various ethical violations. One such violation of privacy took place during the

2016 election. In which a political consulting firm named Cambridge Analytica, by simply posting a quiz on Facebook and noticing a flaw in Facebook's API collected raw data from over 87 million user profiles from Facebook (Chang, Alvin; Vox). In September of 2018, Facebook was once again at the center of a scandal when they announced that a flaw in their "View As" feature gave a hacker access to 29 million user accounts. They admitted that highly sensitive data such as birth dates, recent check-ins, phone numbers, and search history had been stolen (Leskin, Paige; *Business Insider*).

Uber is another example of a tech giant that has had several ethical violations over the years. Including data breaches that put not only their customers' data at risk but the data of their drivers. In 2014 a data breach allowed access to unencrypted names and license numbers for more than 100,000 Uber drivers. Another major scandal involving Uber in 2014 was a complaint that Uber allowed free reign access to its customer's GPS data through their app by their drivers. This was called "God View" internally at Uber and was a major violation of customer trust and privacy (Bradshaw, Tim; *The Irish Times*).

Ethical privacy violations are extremely common in the tech/computing service industry in which any exchange of money for service is involved. These tech giants want to maximize profits and often don't consider the impact on their users' privacy or data. The value of privacy is often competing with the value of convenience. Some of these companies believe that as long as they provide a convenient service that privacy is a non-issue. This is a valuable question that we as users and as a society need to figure out, how much privacy are we willing to sacrifice in the name of technological convenience. The knee jerk reaction to privacy violations such as these is government oversight and regulation. However, I don't agree with this solution. Government regulation often restricts innovation and progress forward. We want technology to

move forward, we want society to move forward. So instead of government oversight and regulation we as developers for these tech giants should stand our ground for proper ethical innovation.

Google employees have staged walkouts several times due to disagreements about the company's direction. One such memorable event was when the employees of Google found out about Project Maven, which was a DoD contract for AI development to enhance the accuracy of drone strikes. Thousands of employees signed a letter to the CEO stating, “We believe that Google should not be in the business of war.” (Leskin, Paige; *Business Insider*). These were developers that stood their ground for their ethical beliefs and values that ultimately changed the course for the company. It is examples such as this that I believe is the best course of action to maintain an environment that supports innovation but also supports and values sound ethical values.

As an older student that currently has a career, I have had times where my moral and ethical values have been put to the test already in my life. From these experiences, I can honestly say that I'm much more confident in my ability to stick to my own ethical values. It is important to make the Code of Ethics from sources such as ACM, IEEE and even that of our biblical teachings as part of our own personal values and to hold true to these values especially when they are pushed or tested. “Titus 2:7-8(NIV) In everything set them an example by doing what is good. In your teaching show integrity, seriousness and soundness of speech that cannot be condemned, so that those who oppose you may be ashamed because they have nothing bad to say about us.” (KJV Bible)

## Works Cited

Chang, Alvin. "The Facebook and Cambridge Analytica Scandal, Explained with a Simple Diagram." *Vox*, Vox, 2 May 2018, [www.vox.com/policy-and-politics/2018/3/23/17151916/facebook-cambridge-analytica-trump-diagram](http://www.vox.com/policy-and-politics/2018/3/23/17151916/facebook-cambridge-analytica-trump-diagram).

"IEEE Code of Ethics." *IEEE*, [www.ieee.org/about/corporate/governance/p7-8.html](http://www.ieee.org/about/corporate/governance/p7-8.html).

"The Code Affirms an Obligation of Computing Professionals to Use Their Skills for the Benefit of Society." *Code of Ethics*, [www.acm.org/code-of-ethics](http://www.acm.org/code-of-ethics).

Leskin, Paige. "The 18 Biggest Tech Scandals of 2018." *Business Insider*, Business Insider, 29 Dec. 2018, [www.businessinsider.com/biggest-tech-scandals-2018-11#september-facebook-announces-it-was-hacked-and-a-trove-of-sensitive-personal-data-from-29-million-users-was-stolen-12](http://www.businessinsider.com/biggest-tech-scandals-2018-11#september-facebook-announces-it-was-hacked-and-a-trove-of-sensitive-personal-data-from-29-million-users-was-stolen-12).

Bradshaw, Tim. "Uber Settles Suit over Privacy Violations." *The Irish Times*, The Irish Times, 15 Aug. 2017, [www.irishtimes.com/business/technology/uber-settles-suit-over-privacy-violations-1.3187929](http://www.irishtimes.com/business/technology/uber-settles-suit-over-privacy-violations-1.3187929).

*The KJV Study Bible*. Barbour Publishing Inc., 2011.