Brayden Kirkland

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Professor Julie Henderson

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The Ethical Dilemmas of Cybersecurity and Applied Computing

To quote writer Aleksandra Pawlicka, Michał Choraś, Rafał Kozik, and Marek Pawlicki, authors of the article "First broad and systematic horizon scanning campaign and study to detect societal and ethical dilemmas and emerging issues spanning over cybersecurity solutions", "…cybercrime is an exceptionally broad term and still not well defined..." I feel that a great struggle for me personally going into the field of cybersecurity and applied computing is being able to detect and differentiate what is or is not a "cybercrime," or what steps to take in order to deal with such a thing. Pawlicka describes cybercrime as something that "…encompasses all the illegal actions which are possible thanks to the access to an information technology structure…" This list of possible actions only grows over time, and as written by Tom Forester and Perry Morrison, authors of the article "Computer Ethics: cautionary tales and ethical dilemmas in computing" found in the *Harvard Journal of Law and Technology 4*, "Technological change penetrates society faster than we can form new attitudes, reach new consensuses, or adapt our legal and ethical codes." They go on to claim that we as a people must adapt to the changing climate of technological progress if we are to endure with the problems that new technology may bring. This ties into the next issue I may face in my anticipated field of work: the arrival of new issues never seen before, and how I will have to adapt to deal with them. Another issue I will face in my field is having to learn new things constantly, and be able to cope with the changes

that the industry will undergo throughout my time in it. The concept of data in the ‘cloud’ is almost completely foreign to me, and I have no idea what it means, how it works, or how it is implemented; as written by Vlasti Broucek and Paul Turner, authors of the article “Technical, legal and ethical dilemmas: distinguishing risks arising from malware and cyber-attack tools in the ‘cloud’ – a forensic computing perspective”, “The numbers of definitions of ‘cloud computing’ appear to be growing almost as quickly as the range of promotional marketing around the anticipated benefits of the ‘cloud.’” To succeed and strive in the field of cybersecurity and applied computing, I must have proper discernment, I must be adaptable, and I must be knowledgeable in an industry that is both hard to define and constantly changing.

The most common ethical dilemma I and many others in the industry of cybersecurity will face is knowing that at any point in time, we could very well use our knowledge for our own personal gain at the detriment of others, just like the people that the cybersecurity industry was made to combat. I would have knowledge and experience in a field that countless other people do not even fully comprehend, and I could very easily use that information to my advantage. The easiest solution to this dilemma is to simply not partake in that nefarious activity, for whatever reasons I or anyone else may have, be that laws, societal pressure, or goodwill. To prepare myself for this dilemma, I remind myself that what I am doing must be for the greater good, or else I serve no real purpose toward progress on a personal level, nor on a global scale. I do feel that I am prepared to face these concerns and triumph over the temptation to be selfish with my power and knowledge, and I feel that society and the people I surround myself have prepared me just as much as my own will.

The ACM and IEEE codes of ethics are both exceptional codes to follow to perform to the best of one’s ability in fields of computational study. In the IEEE Code of Ethics, Principle I.

4. reads, “To avoid unlawful conduct in professional activities, and to reject bribery in all its forms;” Romans 13:1 (NIV) tells us: “Let everyone be subject to the governing authorities, for there is no authority except that which God has established. The authorities that exist have been established by God.” A core trait of being a good and productive citizen is to adhere to the laws under which you live, as these laws are made by an authority established by God; take no loopholes, no easy routes, nor bribes in your work. Principle 1.1 of the ACM Code of Ethics and Professional Conduct reads: “Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.” 1 Corinthians 10:23-24 tells us: ““Everything is permissible” – but not everything is beneficial. “Everything is permissible” – but not everything is constructive. Nobody should seek his own good, but the good of others.” Scripture confirms the validity of these ethical codes to which we should adhere not just while we work in this industry, but always.

In conclusion, I believe that the most common dilemma I, and likely many others, will face when entering and in this field is the fact that we I could easily use my skills for my own selfish gain, much to the detriment of others. I must face this issue and overcome the temptation for self-advancement, and instead focus on uplifting and helping others with my knowledge at any point I can. I believe it is best for one to prepare to face these dilemmas, and an excellent first step is to surround yourself with people who wish to do good in the world, and who have a similar skillset as yourself. The Bible gives us insight and wisdom into the will of God and His plan for us as individuals, and the ACM and IEEE codes of ethics help us translate that wisdom into our particular field of work. The Bible tells us to do good, and so we should do good in everything we strive to accomplish.

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