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### Ethics in Cybersecurity

In the field of Cybersecurity, there are many ethical dilemmas that professionals face on a daily basis. As a Cybersecurity major, I am planning to work in national security upon graduation with the Department of Defense. In this certain field, my co-workers and I will have high security clearances and access to huge collections of sensitive data. We will also be able to use powerful equipment that not available to the general public. It is very difficult to determine what moral lines should and shouldn't be crossed, since cybersecurity professionals have an obligation to protect sensitive data. Therefore, in my field, I believe one of the major ethical dilemmas to face will be finding out my co-workers are accessing these information systems and using it for their own personal use. Taking advantage of one's security clearance and using government computer systems for a reason other than work-related, is unlawful and therefore ethically wrong. Aidan Knowles, an ethical hacker at IBM said, "Cybersecurity professionals are the technological gatekeepers in their respective organizations, entrusted with great responsibility and the high levels of access needed to carry out their roles effectively." Cybersecurity professionals must be trustworthy individuals and able to maintain a security clearance. Personally, I am obligated to keep one's information secure, especially that of the government, and never share it with those who are not cleared to know it. It is the job of a

cybersecurity professional to protect sensitive information, and anyone not protecting this information is not doing their job.

In order to best combat ethical dilemmas such as this, one must build up a good moral compass. Having plenty of experience in team work, such as in the work-place, sports etc., makes it much easier to handle these situations. If one works well with others, then conflict will be reduced and ethical dilemmas can be dealt with swiftly. Aiden Knowles also said that, “Without clear ethical standards and rules, cybersecurity professionals are almost indistinguishable from the black-hat criminals against whom they seek to protect systems and data.” Having especially clear standards and guidelines is extremely important and helps provide good accountability to cybersecurity professionals. When encountering an ethical dilemma, such as that described above, one should always report it to their supervisor. In some cases the dilemma can be dealt with by simply talking about the action in question, but if the situation is any bigger it should be placed in the hands of the superiors. I believe that this is the most ethically correct action to take because one’s superiors are usually more qualified to deal with these situations.

When encountering an ethical dilemma, I believe that it is best to behave with dignity and respect and the moralities of privacy will follow. Personally, I feel prepared for these situations because I have built up my moral compass through the scope of the Bible. I have been lucky enough to grow up with a strong foundation in theology and morality. As a Christian, I am obligated to respect those around me and live for God’s glory to advance His Kingdom. John 15:17 says, “These things I command you, so that you will love one another” (BibleGateway). I know that if I behave in a Christ-like manor, I will be prepared for any ethical dilemma that

comes my way. In order to continue preparing myself for ethical dilemmas, I will be in God's word and build my relationship with Him, so that I will maintain a strong moral compass.

The Association for Computing Machinery (ACM) has a very detailed code of ethics that demonstrates the guidelines that professionals in a computing field should abide by. I am going to discuss the principle on respecting privacy under the general ethical principles and determine whether it is supported by Biblical principles. Respecting the privacy of personal information is vital, especially to a cybersecurity professional, because so much data is collected on a daily basis, that there is a risk of it being exposed. Therefore, "a computing professional should become conversant in the various definitions and forms of privacy and should understand the rights and responsibilities associated with the collection and use of personal information" (ACM, 2018). This principle emphasizes that only necessary data should be collected by organizations. Respecting the privacy of others is a principle that can be found in the Bible. In Romans 12:10 Paul urges us to, "Love one another with brotherly affection. Outdo one another in showing honor" (BibleGateway). As computing professionals, if we show Christ-like honor and love others like the Bible instructs us to, then the principle of respecting the privacy of others will be a forefront.

Now I am going to discuss the principle about avoiding conflict from the Institute of Electrical and Electronics Engineers (IEEE) code of ethics. This ethical principle directs computing professionals, "To avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist" (IEEE, 2020). Avoiding conflict is not just a principle that must be used in computing fields, but should be applied to every aspect of one's life. This principle can also be found in the Bible, specifically in Colossians 3:13 which says, "Bearing with one another and, if one has a complaint against another, forgiving each other; as the Lord has forgiven you, so you also must forgive" (BibleGateway). The Bible makes

it clear that we are to be gracious and patient toward others, not creating conflict. However, if a conflict should arise, we should have a forgiving spirit, not being quick to anger causing further conflict.

## Works Cited

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