Professionalism Activity

EECE 381 Section: L1B Group:2

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This synthesizing summary contains three parts: 1) engineering ethics, 2) professionalism and 3) issues related to Computer and Software Engineering and how important it is for engineers to follow the Code of Ethics, to be professional in their career lives, and to illustrate the role of Computer and Software Engineer in society.

Engineering Ethics

After visiting APEGBC website, we found that this engineering union provides an ethics code which contains ten principles of right and wrong for BC engineers to make a judgment or a decision regarding their working situations. These principles are based on three points: fairness, courtesy and good faith. All BC engineers shall follow the code to understand their responsibilities to the human life and environment.

Moreover, in our professional life, communication is one of the most important elements. Since Canada is a multicultural country, there will be many challenges or opportunities, which would reveal different ethical views to our jobs. Different cultures, religions, or even family backgrounds could give us different ethical lines; however, this situation should not become a barrier between us to follow a same ethical guideline.

The principle of Equal Consideration of interests (ECI) has been identified with multinational organizations. This principle has four main points. The first one is to be honest about information and on time to our peers, your customers and the outside parties. The second one is to do no harm to everyone that around us, and to be careful with our words or actions to others. The third one is to keep our legitimate commitments to people. The fourth one is to be independent during the teamwork and try the best to co-operate with teammates to achieve goals.

Professionalism

Since engineering is a profession, which needs a specialized educational training. It also has its professional request. In APEGBC website, it provides a union syllabus, which clearly demonstrates what skills, courses and knowledge a computer and software engineer should possess.

In stack exchange website, it also discusses the key difference between a software engineer and a programmer. *Programmer: Focus on writing code as the primary activity of software development, often attached with particular programming languages and parts of a whole software solution. Software Engineer: A software engineer is somebody who applies a formal or structured approach to the development of software.* He thinks about correctness, completeness, reusability and workability that matches the end goal for the finished product.

The role of Computer and Software Engineer in society

A professional engineer shall be aware of the significance of their duties: to make people live longer, healthier and more convenience. As computer and software engineers, we attempt to use our scientific knowledge to solve social problem and design applications for social needs related to our daily life. For example, when we are driving on the road and trying to change lane, we always need to do the shoulder check for the blind spots. However, there is still a risk for large vehicles, or for new drivers who is not good at driving. Last month, my friend just bought a new car, which has the Blind Spot Detection system (BSD) and Lane Departure Warning system (LDWS)on it. Both systems have the ability to avoid car accident due to changing lanes and become a "safety guard" for new drivers and long distance drivers. Another example is related to ourselves, in the module two, we built up a simple surveillance camera system, which can watch out a location and detect the changing in that location. This system can be used in home security in order to protect people from harm. Even this is only a simple version and many extra features can be added, the core value of being a computer and software engineer cannot be omitted, which is to utilize technology to protect people's safety and property, and also improve their daily lives.

References

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[2] Stack Exchange (n.d.). What's the difference between programmer and software engineer? stackoverflow. [ONLINE] Available at: http://stackoverflow.com/questions/27516/whats-the-difference-between-programmer-and-software-engineer.