Self Assessment

**Part A**

For my project I worked as a solo team to design a network based covert channel. This was a great project that allowed me to development my skills working with networks. This was done by utilizing python code to send and receive TCP packets over a network. It also taught me very much about python as both sides of my covert channel were developed using python code which greatly improved my skills with various python libraries. These skills included using libraries such as sockets, collections, and binascii. All of these experiences built on things I’ve learned throughout my college curriculum in computer science such as network security, python, data encryption, and web development.

My biggest obstacles was building my networking skills as I took my courses in an irregular order so it had been a long time since I took network security. My biggest successes were the things I learned about building diagrams, and certain aspects of networking as it also improved my ability to do my job where I work as a web developer. I also found that I learned very much about reading and interpreting scientific research papers as when I was doing research I had to read several extensive papers on the science of covert channels.

**Part B**

The things I accomplished were quite extensive such as the accurate implementation of work flow diagrams. Also the proper maintenance and setup of a proper Github repository. I also learned very much about how to build a project from scratch as up to this point I have mainly just contributed to other projects on opensource Github repositories. Due to the fact that I ended up working alone in the end I can’t speak to what aspects of teamwork were successful for this project. However, I can speak to the things I have learned working with teams for other classes and teams in my workplace. I have found that for my classes it’s very important to communicate consistently and effectively to ensure all members have clear roles. I have also found that it is important to be very punctual and try to submit work ahead of deadlines as to not increase stress levels for the rest of your team.

As for my work with Siemens I have been working for my current team consistently for 3 years now. This semester we received 5 co-ops on their first rotation and as I am the only other team member in the United States I learned that it is important to provide clear instruction and assistance whenever possible. As for my efforts on the project I believe I have done a good job of meeting deadlines and ensuring that the code I write is up to high level of conciseness and understandability. As far as recognition I would like to recognize my academic advisor Fred Annexstein as I had a unique situation of working solo and he provided guidance that allowed me to still complete a project despite this unfortunate turn of events. It has been a wonderful couple of semesters and it has definitely provided me with the necessary skillsets to develop more independent projects in the future and continue to build up my skillsets and portfolio.