Nick Teo gt224

Electrical Engineering

Cybex International

Summer 2014 Work Term

A. Co-op Work Assignment

I was part of the hardware and software engineering department of Cybex International. The hardware/software department works together with mechanical and manufacturing engineering to produce cardio equipment and mobile apps that users will be able to use. I was working on a piece of a project called Ikabit. Ikabit is meant to replace some of the present circuitry inside the Cybex cardio equipment. I spent my summer designing and implementing the user interface for the cardio equipment. This involved learning JavaScript and Node JS and working with another intern to determine the best ways to do certain things in the application.

I would go Chris Morgan for most of my questions. His position at Cybex is a senior software engineer. He would answer any questions I had about top level details and also many of the coding specific questions. Sandy Terrace was also very helpful with any coding questions and always made an effort to review my code. Paul Kafig was a great resource as well for any electrical engineering related questions. Larry Raines is the technician at Cybex and he's great if you have any questions about soldering or if you need any rework done to a board. He's also a very nice guy and easy to talk to if you just want someone to chat with.

B. Assessment of Learning and Development

My work activity lined up pretty closely with my educational background and career interests. I was able to do a mix of hardware and software work, which are both very interesting. Of course, I needed to learn many things on the job, but that's part of the engineering experience. Engineers are always learning from each other and asking each other for help. There were a number of times where I would not have been able to move past a problem had I not asked for help. Online forums, mailing lists, and IRC chatrooms are all very important resources to solving problems.

My position at Cybex reaffirmed my interesting in becoming an electrical or software engineer and gave me insight into how different schoolwork is than work in industry. For example, writing code in school, for me anyway, consists of hacking away at code until it works. When it works, it's ready to be submitted. This is much different than coding at work. Code has to be clean and well written so that the next person looking at it can easily read through it and understand. This position has also shown me that I do not have all the answers and that I need to have the sense to ask for help when needed. It was also important to learn to take responsibility for the project. No one is around to hold my hand through each step of the process, but people are there to guide me. Given the chance to go through the same experience again, I would spend more time looking at other people's code to learn better coding practices.
C. Life Outside of Co-op

I found housing through Craigslist from a student at Clark University. The Worcester area is not the best area to live in, so be aware of that if you are thinking of moving to Worcester for the summer. Also make sure that you can trust any apartment mates (if you will have any). That would have saved me a lot of worrying whether my things would be stolen or not. Again I would definitely recommend having a car around Massachusetts.

During the summer it was great to meet other interns from other companies. I knew some co-ops working at Intel and I was able to get to know some interns there. We would play some ultimate Frisbee every Thursday and spend time together on the weekends going into Boston or just hanging around the area. So definitely make some connections at other companies because there are not that many interns in the summer at Cybex.

D. Evaluation

My favorite part of this job was being able to start a project with just a concept and designing the application and implementing and seeing it come to life slowly. Being able to build a project from the ground up is one of the best experiences. The hardest part of this job is the same as last time, writing good documentation and code so that other people reading the code will be able to understand what is going on. This involves writing documentation for the code and naming variables inside the code in clear and concise ways.