Job Summary

Co-op Work Assignment

During the fall semester, I worked with Booz Allen Hamilton’s R3B team supporting biometrics research for the Department of Defense. I worked directly with our clients at Fort Meade, MD to research, test, and develop up-and-coming face recognition systems and their applications.

During this semester I worked on a number of projects—some building on ones I completed last summer and some new ones. For the first half of my semester I was waiting for my full government security clearance to come through so I focused mainly on research and testing. My first project was to update the research I had completed on the online applications of face recognition—I broaden my research to focus on all commercial applications of face recognition and the companies providing them. Afterwards, I developed a system for testing the face detection and recognition capabilities of commercial face organization programs. Once my clearance process was completed, I started working with the R3B development team—Booz Allen Hamilton is developing a web-based face recognition system to facilitate the sharing of information between different government agencies. We are currently in the early stages of the development process so I was responsible for getting price quotes for the system’s hardware and software along with creating different concept visualizations in Photoshop—by the time I return in the summer, the team will be in the middle of development so I will be able to help code the system. The final task I completed during my semester was training on face recognition techniques and the systems used by our clients. I was responsible for responding to outside requests of identity—we would receive a facial image and would search our databases to attempt to identify the face.

There were a number of training opportunities available to not only interns but to all Booz Allen Hamilton employees. On a weekly basis the company held technical “Brown Bags” where a few other employees gave presentations on the tools they used/created and the projects they were working on while the company provided lunch. Booz Allen Hamilton is also a major supporter of face recognition research. The company hosted a two day conference bringing together other government and law enforcement agencies to discuss the projects and research being completed throughout the community. Besides that if I needed any other assistance or training I went either to my mentor Matt Lake or another person on my team and they were always willing to answer my questions.

Assessment of Learning and Development

I did not directly apply most of what I learned in my ECE classes; however, other basic engineering skills did translate into my work. I was directly involved with the development team and I was able to see process behind developing a product. Together with my team we created specifications for the system, a theoretical timeline and cost analysis, along with use cases and mock-ups of the system. I learned about this basic process in ECE 3130 over the summer; however, it was for a much shorter time frame—there is a lot of planning that needs to go into a three year project. I was alsopreviewed to technology that is not generally used in everyday
life. I truly enjoy learning and working with biometrics; the applications of this technology is endless, it just needs to be improved first.

My co-op experience gave me a different view of the business world than many co-ops would have. Instead of working in a lab or sitting behind my desk all day, I was interacting directly with my clients. Also, a lot of co-ops are only required to wear jeans and a collared shirt; Booz Allen Hamilton is well known for their professional dress—everyone was wearing either slacks or suit to work every day. Overall, my co-op gave me a great understanding of how a government contracting firm works and all of the politics that go along with it.

My position greatly influenced both my professional and personal development. Not only did I write three research and testing papers I also presented each one of them to our clients. I gained a lot of experience in presenting in front of my colleagues and also gained confidence in my answers to questions I was asked during the presentations. As the semester progressed I also became more comfortable talking to my supervisors whenever I needed help or more work to do—taking this initiative was very important to increasing the amount of responsibility I was given.

Live Outside of Co-Op

I lived at home for the semester because my house was twenty minutes away from my office; however, I am looking to live in a Baltimore apartment next summer. The only real way to get to and from work is to drive; once at the office if I needed to go to another building for a meeting there were almost always shuttles running or other persons who were going so I never had to drive around too much.

Booz Allen Hamilton participates in a large number of sports leagues throughout the year and puts together at least two teams for each sport. I played dodge ball and met three other Booz Allen Hamilton employees who I became friends with. Also, Booz Allen Hamilton has a company networking event once a month that most people go to—the event provides free food, drinks, and entertainment. Also, the company holds a Holiday Party every year (however, this year it was cancelled due to the two feet of snow).

Evaluation

One of the best features of this job was the working environment. All of the people I met were very friendly and were willing to help if I ever needed it. Also, everyone always said hi in the hallways and when a new person moved into an office, higher level employees would always come and introduce themselves. Another great feature of this job was the topics of the projects. A lot of the work done in Booz Allen Hamilton consists of developing and working with up-and-coming technologies—I found face recognition to be a very interesting field and truly enjoyed learning and working with it.

The worst feature of the job was the clearance process. Because a lot of the work done at Booz Allen Hamilton is for the Department of Defense, some level of security clearance is necessary to get onto most projects. I luckily started the process summer before sophomore year when I interned there, but the process can take up to a year depending on the clearance level necessary for the job. Most of the time Booz Allen Hamilton
will have work for an uncleared person to complete; but once and a while a person is signed onto a project but can’t really work on anything.

Additional Information
I believe Booz Allen Hamilton is a great place to complete a co-op. There are locations throughout all of Maryland, northern Virginia, and other places in the United States so there are many places to work. Also, they are willing to move people around to ensure they are working on a project they enjoy which is not always customary at all companies.
Job Summary

Co-op Work Assignment

During the summer, I worked with Booz Allen Hamilton’s R3B team supporting biometrics research for the Department of Defense. I worked directly with our clients at Fort Meade, MD to develop a prototype facial recognition application.

During this semester I worked on a number of different projects varying in size. For my first project I was responsible for creating and maintaining multiple wiki pages for the biometrics team. These wiki pages provided information on the team, as well as a way to collaborate notes from meetings. Along with the wiki pages I also created a number of wiki templates for the rest of the team to use when adding additional information. Another small project I worked on was creating visualizations for use in upcoming conferences Booz Allen Hamilton and our clients are hosting/attending.

The major part of my time was spent with the R3B development team developing a prototype web-based facial recognition application. Last fall the team was in the early stages of the development process—I was previously responsible for creating concept visualizations for the application. When I returned in the summer the application was in the process of being developed. In order to come up to speed with the rest of the team I learned ASP.Net 3.5, JQuery, and C#. I also familiarized myself with Booz Allen Hamilton’s custom developed GOTS framework which provided the base architecture for the web application. The specific function of the web application I developed was the ability for users to submit new images and update information about existing images.

There were a number of training opportunities available to all the interns this summer. I participated in a Security + certification training course and achieved my Certified Ethical Hacking certification.

Assessment of Learning and Development

This summer I was able to apply my knowledge from my Computer Science classes more so than my ECE classes. I worked closely with a development team and applied my object-oriented programming skills to my tasks. I had previously only worked with Java, but having a strong understanding of the language allowed me to quickly pick up C# (which was used in our application). I also learned more about basic web programming (HTML) and database management.

My co-op experience gave me a different view of the business world than many co-ops would have. Instead of working in a lab or sitting behind my desk all day, I was interacting directly with my clients. Also, a lot of co-ops are only required to wear jeans and a collared shirt; Booz Allen Hamilton is well known for their professional dress—everyone was wearing either slacks or suit to work every day. Overall, my co-op gave me a great understanding of how a government contracting firm works and all of the politics that go along with it.

My position greatly influenced both my professional and personal development. I was given a lot more responsibility than last fall. Instead of doing my own tasks that were due at the end of the term, I worked...
directly with a team with more frequent iteration deadlines. I learned a lot about time management and task estimation—accurate time estimation is imperative when discussing deliverable deadlines with clients.

**Live Outside of Co-Op**

I lived at home for the summer because it was at most twenty minutes away from work. The only real way to get to and from work is to drive; having a car was very important when I needed to travel from my office to client space which was about 15 minutes away.

Not only did I spend time with employees that I met last fall but I also met a number of other interns from the summer. Booz Allen Hamilton doesn’t have a specific Co-Op program yet so last fall there weren’t any other interns, but the internship program in the summer is much more organized. They had a number of intern only events such as lunches and picnics that I participated in. I also did trivia once a week in Baltimore with as many as 10 other Booz Allen Hamilton employees.

**Evaluation**

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The worst feature of the job was the clearance process. Because a lot of the work done at Booz Allen Hamilton is for the Department of Defense, some level of security clearance is necessary to get onto most projects. However, Booz Allen Hamilton has accounted for this for all of the interns. All of the un-cleared interns were split into project team groups that worked together on reverse engineering and a large cyber security project that was presented in corporate headquarters in McLean, Virginia.

**Additional Information**

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