Programming Experience

Comp 151

Om Kanwar

9/14/17

The idea of becoming ‘tech savvy’ has always been appealing to me so I can work as quickly and efficiently as possible on a computer. Throughout high school and my first two years in college, I thought that I was best suited to major in Chemistry. As I became more and more exposed to computer science, just through my personal exploration of the subject, the limitless capabilities that come with a computer-science education piqued my interest more every day. My father runs a data analytics firm in Chicago and his line of work is exciting and intriguing to me. In the summer after my freshman year of college, I interned at his data analytics firm and even more entrenched in the subject. As my interest in computer-science increased, my interest in chemistry waned. It eventually got to the point where I no longer wanted to pursue chemistry and wanted to turn all my attention to computer-science. Therefore, last semester (Spring 2017), I decided to switch my major to computer-science and embarked upon a challenging path to try and complete the four-year program in just two years, so I could still graduate on time. I am taking this class to further my knowledge in computer-programming, to become as proficient as possible in writing code, and of course because it is a requirement in the computer-science major.

After I graduate, I hope to either immediately start working in the data analytics field, or continue on with my education and get my master’s degree in computer-science. I don’t have a specific school in mind of where I would want to pursue my master’s degree, but would love to stay in California or be near home in Chicago. Computer-science has, I think, the most options in terms of successful career paths in our society today and thus it is exciting to think about future career prospects. I am especially interested in the data analytics field. I would love to work in a data analytics specific firm, or to work in the analytics department of any intriguing company. Because I still have a background in Chemistry, I would like to be able to combine the two disciplines and work in the data department of a pharmaceutical company or other chemistry technology related jobs. My biggest interest outside of the classroom lies in sports, so my dream job would be to run the analytics department of a sports team and work with statistics and data from sports. I like the idea of being able to manipulate data in order to make future predictions about upcoming trends or to examine the successes or failures of any company or sports team. I also enjoy the concept of manipulating data and creating new databases with a specific data set to better analyze the set of data. A valuable skill I hope to be able to employ regarding this, is to make good data better using these sort of manipulation tactics and not necessarily just needing more data to accomplish more things.

I took my first programming class this past summer in Chicago at Oakton College. It met twice a week in the evenings for several hours. The class was focused on learning as much about the Java language as possible and learning how to write and implement Java code. One homework assignment that was particularly interesting from this class was centered around writing code to concisely display and keep track of the scores of a bowling game. It was interesting because there were several different methods and functions working in cohesion in a seemingly complex manner that outputted an extremely concise program. A difficult homework assignment from this class was writing a program to take numerical input from a user and transform the numerical input in several different ways. I had to write out the factorial function of the input, write out the factorial function of the input backwards, multiply the digits of the numbers together and display the output etc. This was challenging because writing methods such as this was foreign to me at the time, eventually through lots of searching I was able to compile a correct code for the assignment. Difficult exam questions were ones where I had to write code for a program without the help of a compiler. I definitely relied on the help of a compiler to correct my code and find errors, thus without a compiler, writing code became more difficult. A confusing topic for me at first was deciding which loop structure was best applicable to the code I was trying to write. I got better at this just through trial and error and plenty of practice problems. I learn new topics best through hands-on learning and through trial and error processes. The more practice I get with computer-science, the better my trials have been when learning a new topic and the less errors I make.