During my freshman year I started as a math major. Most of the courses for a math degree are locked behind prerequisites, so I had plenty of time for electives. One of the electives that I took was Dr. Nordstrom’s Introduction to Computer Science, which was an excellent class. I enjoyed the class and decided that I should sign up for the next one: Dr. Arisoa’s Introduction to Computer Programming class. Even though the class was occasionally difficult, I enjoyed it much more than the math courses that I was taking. I realized that I enjoyed the content of my computer science courses much more than any of the math courses that I had taken, and I decided that I wanted to try doing a double major with computer science and math. The first semester of my sophomore year I filled half of my schedule with computer science and information technology courses. This semester was a great one, and I ended up as the teacher’s assistant for one of the courses, object-oriented programming. My next semester was not nearly as enjoyable, as I had two computer science courses that took a decent amount of time to learn the material. I also had a course in differential equations and physics, which took up a massive amount of time to learn. I of course had more courses, so this ended up being a fairly difficult and stressful semester. Luckily, I was living on campus that semester. The semester was still difficult, but it helped that I did not have a commute to worry about.

My first semester of my junior year was another fairly difficult semester, as I had another physics course, design and analysis of algorithms, and mathematical theory of statistics to deal with. The design and analysis course was fairly interesting, and fairly difficult, and was one of the courses that I have actually had to use in future courses. Many concepts from the course pop up in other courses, mainly those that have to deal with calculating run times. Occasionally other courses will touch on certain algorithmic techniques, like dynamic programming, that were taught in this course. My next semester was a fairly annoying one, as I had three courses that were only taught at night. Thankfully the courses were not extremely difficult. Two of the courses, linear algebra and automata & formal language theory, have actually been quite useful in some of my later courses. Linear algebra comes up in many computer science applications, and automata was used heavily in my compiler construction class. The internal structure of the scanner and parser for my compiler was represented using a finite automaton, and the syntax that both used was regular expressions and context-free grammars.

My first semester of my senior year was fairly interesting. I only had one more general education class to take, and the rest of my classes were high-level computer science courses. I also found an internship in the middle of the semester. I did not expect this semester to be fairly difficult, as I only had thirteen hours of courses. As it turned out, I was very wrong. I took compiler construction this semester, and it was an extremely difficult course. The material presented throughout the semester built on my previous coursework, but implementing the various components of my compiler was a painstakingly slow process. The issue was compounded by the fact that I was working at my internship during the week, and also working at a retail store over the weekends. Towards the end of the semester I had to leave the retail job so that I had enough time to finish the compiler, as well as work on another group project in my software engineering course. This was another course that I did not expect to take up a large amount of time. Unfortunately, the group that I was assigned to contributed next to nothing to the project. I ended up programming almost the entire thing, and I could not just drop the class or change groups, as I needed the class for Salt II credit. This has been par for the course with most group projects in my experience. One or two people will do most of the work, and the rest of the group will get the same amount of credit. Some of my projects have been different, but not most. My second, and last, semester has been much better. I only have to come to school for a numerical methods course, two independent studies that turned into an excellent group project, and senior seminar. This semester has been a welcome change from my previous semesters, as it has given me more of a chance to relax. Graduation is approaching soon though, and I have started looking for work after I graduate.

I have also participated in a number of extracurricular activities through Lipscomb. One of the more recent activities that I participated in was ACM’s ICPC programming competition. I competed in the competition previously, and the teams that were sent from our school actually did not do badly at the regionals. This year was a bit different. The programming questions that were used were much more difficult than questions from previous years, and our teams were lucky to solve one to two questions. This can be partially attributed to a lack of preparation. Many of the schools competing in ICPC prepare year round for the regionals, but our school generally only prepares two weeks in advance. Preparing a team for ICPC takes a large amount of time from a professor, but it would be time well spent. The same situation occurred just last week at the SECCDC cyber security competition. We competed in the preliminary round after only being informed two weeks before the competition. Somehow we managed to place sixth in our region, so we will be competing at the regionals. The regionals are going to be much more difficult than the preliminaries, as the team tasked with attacking our servers does not have thirty teams to worry about. We have about a month before the competition, so we should be able to practice. This may not be enough time though, as other schools have been preparing all year. While it is a bit too late for me, I do hope that our professors recognize these problems and attempt to solve them for future students. The competitions are not a waste of time, and I can say that I have learned so much from competing in them. The experience gained from applying concepts you learned in the classroom to real world situations is invaluable.

Overall, my college experience has been a rewarding one. Aside from the frustrations experienced regarding some of the extracurricular activities, most of my learning experiences have been positive. I will be graduating in about two months, and I can definitely say that my coursework has prepared me for a job in the real world.