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When applying to colleges in 2007 at the age of 18, I began thinking about what education and career to peruse. Choosing a major for a college education was never something I had given a whole lot of thought before this time, I just knew that getting a college education was expected of me. I began to think about what I enjoyed doing; I liked and played sports all through my life, but becoming a pro athlete was out of the question. Video games were always a hobby of mine, but I never was interested in video game design. I had always done well and enjoyed my math and science courses growing up and learning about the how and why things worked and behaved the way they did, which lead me to consider engineering as an option. As I began to do a little more research into what engineering entailed, it seemed like it might be the right fit.

2

I declared the major of Mechanical Engineering when I began college in the fall of 2008 at Old Dominion University. I was excited to begin this new phase of my life and begin studying a field I was interested in, but there was a lot more growing up and soul searching I had to do before that took place.

3

After two years at Old Dominion before I decided to come home. I wasn’t prioritizing my studies the way I should’ve been and it reflected in the classroom. I felt that coming home would be the right move and allow me to refocus and get my priorities in order. One of the biggest reasons why I didn’t do well while I was at Old Dominion was because I partied too much. However, after I came home, that party lifestyle was still a part of me and continued to affect me as I began courses at Northern Virginia Community College. The focus of partying still trumped the studies I should’ve been focusing on. As a result, my grades were never fantastic, and I began to lose the drive that I once had towards a degree in Mechanical Engineering. During that time, I began to lose faith in myself that I could complete an engineering program, as I knew it would be a very rigorous one.

4

I switched my degree intentions a couple of times while I was at NOVA, from engineering to business administration, from business administration to psychology. Each of these degree changes seemed like the right move at the time and I felt inspired to pursue these routes based upon certain classes I was taking. I could envision myself completing these degrees and at the beginning of each semester, I had a new vigor where I believed I’d be able to focus on my studies in the proper way. However, the energy that I would have at the beginning of each semester would eventually fall by the way-side and my studies would take a backseat backseat to what? in my priorities.

5

This became a cycle for me from the ages of 20-22 and I eventually took time off from school altogether. I needed to work on myself and do some serious self-reflection because I knew that if I didn’t buckle down, I would never go anywhere regarding college. Shortly before my 24th birthday, I returned to school at NOVA. During my time off from school, I was able to mature and gain the responsibility necessary to achieve success in the classroom as well as rediscover my desire to pursue an engineering degree. Once again, I had changed my major, back to engineering.

6

After re-entering school, I was able to put forth the effort necessary to do well in my classes. I had a focus towards my major that I did not have earlier in my college career. I remember being *enthralled* with the topics that were covered in my lower-level engineering courses while I pursued an associates degree, particularly the study of mechanical systems. Learning about how certain objects behave while in motion and how they interact with other objects within the same system furthered my interest in the subject and reaffirmed my decision of switching back to engineering as a major. Eventually, I graduated from NOVA with an Associate’s Degree in General Engineering and enrolled at George Mason as a Mechanical Engineering student.

7

During my time at Mason, I’ve been able to learn so much more about the world of Mechanical Engineering and see how many different career paths there are to go down. When taking Thermodynamics, I was able to see how the material from that course could lead to a career in HVAC system design or work in a powerplant. Fluid Dynamics showed me how that could lead towards work in a career in aviation design. Electrical circuit courses have opened to doors towards a career in working on electrical systems. It seems as if the opportunities are infinite, which excites me as I am planning to finish my degree this coming December.

8

This past year, I worked with a team for our Senior Capstone project. Our task was to construct a 3-D printed exoskeleton robotic arm to be used in a physical rehabilitation environment to assist patients in their therapy by being able to read their muscle activity using EMG sensors and relaying that information to a control unit and motors to perform the desired arm motions. A major challenge of this project was the fact that a lot of the knowledge required to complete had not been taught to us in the classroom and required a lot learning on the go. A lot of the research and work that I performed on this project helped me focus a little more on what I might like to do career wise post-graduation, particularly utilizing 3-D printing.

9

Getting a lot of hands on experience with 3-D printing allowed me to realize how enjoyable and fulfilling it is to create your own design from scratch and have it manufactured within a few hours. I enjoyed every second of designing a component in a computer drawing software and how using a 3-D printer allows for the ability to produce rapid prototypes. After graduation, I hope to work designing mechanical elements.