Reflective Essay

There were several things that I took away from this class that I feel will stick with me. First and foremost, my goal to learn the Rust programming language provided an impetus and excuse for me to dedicate time towards this objective that I was passionate about. The project I chose was to rewrite a piece of software used by the SuperDARN community for data processing. I have completed the first step in the processing chain and verified that my software produces results matching the standard software used by the community. Not only that, but for large files my software can parallelize and more optimally use resources, processing up to three times faster on my computer. I am very happy with the progress I made and with the programming language in general, and I know for certain I will use it again on projects in the future. I feel that I have a working understanding of the programming language and have achieved the goal in full.

My goal of creating a five-year plan was a moderate success. I have dedicated much thought to my near future throughout this course and have had many conversations with my wife around the topic. I feel I have a better understanding of my ambitions and opportunities to pursue them than I did at the beginning of the course. However, I did not formalize any of this in writing or some other medium. I find that I lack productivity in tasks of this sort. Furthermore, I find that when major decisions arise, no matter how much thought I put into it, I almost always pick my gut reaction. I've been reading a book lately that backs this up – people often come up with (sometimes weak) reasoning to justify their gut feelings. Looking back on the major decisions I've made in my life I find this to be true. I am surprisingly content with this reflection. I trust my gut feelings to guide me, and my reasoning to adjust when my guide is wrong, or I cannot follow. All that said, I am happy with the critical thought and discussion that I have put into planning my future.

My last goal was to improve my sleep habits. This goal was spurred by my unhealthy sleep patterns that were present during the spring semester. These patterns were the result of my course load and time management strategies. For course work that I am not eager to complete, I have found that my productivity is near zero if the deadline is not near. Knowing this, I am happy to do other things until the deadline nears, knowing that I can always stay up late to complete the work. I did this often in my undergraduate degree, and again during the spring semester. Once the semester completed, my sleep habits improved as I no longer had a reason to stay up late. Another challenge is that I travelled internationally four times since January and dealt with jet lag each time. However, on average since May I have been spending 7.5 hours in bed per night, thus meeting my original goal.

Lastly, I've reflected on my mission statement since writing it. I believe it still holds true to my base feelings. My graduate degree so far has furthered my expertise at SuperDARN and has increased my satisfaction with the work I have done. I have had the opportunity to travel to two scientific workshops and discuss my work with established scientists, which I found extremely fruitful. I have ideas for how to improve the scientific product that SuperDARN provides that I am excited to implement as a result. I believe I am somewhat uniquely qualified in our team with my background in both technical radar operations and scientific theory to advance the capabilities of the SuperDARN community. I have learned that I am happiest when I can take on a project, learn from the ground up, and be competent and confident in my knowledge. This is why I was so happy with my experience programming a project in Rust.

Overall, I am content with the person I am right now and excited for what the future has in store. I am looking forward to continuing to learn and develop expertise in new areas, both professionally and personally. I managed a large workload and busy schedule over this course and am happy to be wrapping up and moving on to new experiences.