Iowa State University Cumulative Reflection Sean Gordon March 13, 2020

I had never cared for high school, putting little effort into homework (if I did it), and moving vaguely forward with nothing but curiosity to guide me. Nothing was changing anytime fast until I finally found a life goal in my Senior year and realized just how ineffective my current lifestyle would be at reaching it. Dropping into my bachelor's degree in Computer Engineering at ISU served as a new start, a way to reinvent myself, and I hit the ground at full sprint.

I had chosen the degree because of my fascination with computers, as well as the endless possibilities such a skillset would afford me. ISU was a perfect place to begin this chapter in my life, with its highly rated engineering program and the colossal support network woven through everything. As I progressed, the core classes refined my problem solving, and forced me to work better in a team. The resources available to me helped me with this, improving my understanding of the world and giving me help to fall back on. The experiences I have had have also pushed me to improve myself, and I focused on improving my base skillset, refining my learning techniques, and improving my physical health.

As the major I selected is designed to improve one's problem solving skills, it is only natural that the core classes were what helped me with that the most. Almost all the required CprE courses are designed to redefine how you approach a problem, sometimes from multiple different angles at once. For example, the final project for CprE 381 was to design an entire computer processor. Working with state-of-the-art technologies like ModelSim, the project better prepared us for a larger assortment of problems we may face in the future and served as an opportunity to refine and test procedures for dealing with large and complicated projects. However, the inherent difficulty of the course forced me to learn where to look for help, often in the form of fellow students or TAs, working with others to find a breakthrough when I had no leads.

When working on large projects, it is usually practical to work with a team. The core classes certainly didn't skimp on that, with much of the coursework being presented in team situations. While I would have considered my teamwork skills proficient before, with the training provided I am now certain that I can work well with any team I will be part of in the future. Having other brains on the same issue helps immensely with coming up with a solution and refining one once it is found. This experience, all the good and the bad, will be of immense help in a professional environment.

To expose students to more of the professional environment they will join in the future, ISU provides numerous opportunities to work with employers, or simply provides access to hard to reach materials. For me, the Career Fair specifically was an invaluable tool, opening the door to internships and full-time jobs, as well as serving as an arena to apply and refine the

communication skills I have learned thus far. It has given me many glimpses into the professional responsibilities I am moving toward, at multiple points reinforcing the notion that my knowledge cannot fall stagnant if I want to succeed after college, requiring constant exploration of new concepts and inventive practices.

These experiences have reinforced and heightened my need to better myself. When not busy with homework, I inhale as much information as I can. This process has been accelerated with the universities provided access to various scientific journals and other texts that I otherwise would have great difficulty reaching. With these and other resources, I have been able to explore much more deeply into the world of artificial intelligence, and software development in general. Because of the importance learning has in my life, I have spent an extremely extensive amount of time refining my learning process, hoping to speed up progress and reach my goals that much more quickly.

The improvement process was not only scholarly, and I have used ISU's gyms and clubs to great effect when improving myself physically. I began lifting weights consistently, and more recently joined the ISU Boxing Club, of which I am currently competing in. The physical improvement process has helped immensely with mental fortitude and willpower, allowing me to more easily control my actions, and has resulted in a drastic decrease in procrastination and an immense boost in productivity.

In all, my experiences at ISU have greatly improved me as a person, helping me grow leaps and bounds above my starting point just a few short years ago. With the central courses building and refining my critical thinking, both solo and with a team, and the extensive support network ensuring my success, this degree has proven to be the perfect choice. The opportunities I have been presented with are unparalleled, with the Career Fair helping me understand what I will need to be able to do to succeed in the future, and the student resources like the virtual library and gymnasiums letting me improve myself just that much faster. I am certain I am a much better person than when I started here, both when working with people and when working with computers. If I were to redo the experience, there is little I would change, as both positive and negative experiences have contributed to the person I am today. ISU has proven to be the perfect place for me to grow and will undoubtedly serve as a fantastic point to launch into my future.