DREU Final Report: University of Michigan
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What I Took Away?

The most valuable piece of knowledge that I took away from the summer was how appealing graduate school looked for me. Before the summer I had a vague idea of what it meant to be a grad student, I had never conducted research before. However, after my experience at the University of Michigan, I was able to better understand what it meant to conduct research, and what it meant to be in grad school. I did not take any official courses, but I was able to talk academic advisors, Dr. Jenkins, and the grad students about what their graduate program is like and give me a feel of what to expect.

One other thing that I took away was the amount of time it actually takes to accomplish something or reach a conclusion in research.

One other thing that I took away was how difficult it was to make a robot do the simplest of tasks.

Pros and Cons

Starting with the pros, the accessibility of the grad students in Dr. Jenkins was nice. At any point in time, there was always someone that was able to talk to you about a more advanced subject.

Something else was the work environment, there would always be robots moving around, and people having fun writing code. This was special for me because I love this sort of environment, where everyone around you is interested in what they're doing, and what they are doing is very cool.

I was given access to drive and program the very expensive robots within the lab. This was a fantastic privilege and I'm glad I had the opportunity to do so. I know that I may not have access to that type of equipment for a very long time, so I took advantage of the situation

As for cons, the learning curve for some of the topics was so high that it was unrealistic to expect to be able to understand certain concepts in a single summer. There was so much I wanted to be

able to do and understand, but there just wasn't enough time. I suppose this was a good problem to have.

Overall Experience

This was an excellent experience. It allowed me to investigate something I was very interested in at the beginning of the summer, research and robotics. One of the reasons this summer was a success was the ability to work in such a positive environment with other individuals who were passionate about what they were doing. In the beginning of the summer, Dr. Jenkins went through a lot of the basic mathematics in order to help us understand how robots are programmed. Then, throughout the summer we applied these concepts within the 4-Progress Lab. This step by step progression really added to the feeling of accomplishment.

I learned a lot from working on the projects that I chose as well. From developing a better machine learning model to implementing Iterative Closest Point (ICP). Most of the work was independent, but I had ample resources that assisted me along the way. Resources such as the grad students, Dr. Jenkins, and the other interns.

It is also really nice to get to experience what it was like living at the University of Michigan. The university made a very positive impression on me, and open my eyes to considering it for grad school. If I had not had this internship, I am not sure I would have been as interested in applying to the University of Michigan, that was really valuable. The excitement of Ann Arbor alongside the heir of academia made a very pleasant and fulfilling summer.

Thank You

I would like to thank DREU for giving me this opportunity, it is something I will remember for the rest of my life. Being able to explore a field of interest in such depth, at a prestigious University was an invaluable experience for which I am very grateful. I know that in the long run having gone to the University of Michigan will impact the way I look at Robotics, graduate school, and research. Once again thank you for giving me this opportunity, it was a terrific experience.