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CS5001 Senior Design I

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Individual Capstone Assessment

Going into my 5th year, this capstone project has been lingering on my mind. I knew going into it that I did not want to focus on working on just a web or desktop application. I knew I wanted to work with people outside my major and I knew I wanted to work on something to do with sustainability since that is something I am very passionate about it. When this project was suggested to me, I was more than interested on participating. I think that because I am going a little more into manufacturing which I haven't had much experience with but that also excites me about this project.

I think out of all my curriculum the courses that are going to be the most helpful is my Engineering and Design Thinking course (ENED1120) which really helped with my spatial awareness as well as helped me with working among other majors. The last group that I worked with that was multidisciplinary was my first year so I knew that I wanted to do that again. In my Introduction to Computer Systems Class (EECE4029) and my Physics I class (PHYS2001) I learned about circuits and how they connect to an operating system.

Within my work experience I also have not had too much experience with the manufacturing side of a company, mostly working within already built in systems. I think of all that I worked on within my co-op semesters, my work at 84.51 fits best. I helped me learn more about how different platforms interacted with each other and how they fit together within code. So learning how to connect a system to code with different platforms using schedulers such as airflow will help me work with the computer engineers to connect the mechanism to the code.

This project really makes me feel like I am creating something that will be used by a company. I really want to focus on leaving a legacy project that is maintained and I can link my name to. This project is also something that requires interdisciplinary work which is where I fit best. I love my field, but I also work best when there are other people with different expertise in their own industries. Working with other majors also makes me feel like the project is clearly robust and requires more than just software development work.

My solution towards this project will be to focus on how the solar panels will move in regard to the geolocation data. I also think that the geolocation data will be used as input using MATLAB and will be connected to the panels with a scheduler. Possibly using airflow. I will assess my work towards the project with the interface and how well the solar panel takes input an reacts.