

Project Summary Report

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Motivation to apply for this project

This year's project is a follow up to my previous summer internship with A5, where I had previously developed a piece of management software for the group. I applied again this year, hoping to continue my experiences working at NASA KSC, and was fortunate enough to be selected by the same mentor again.

Hearing about this opportunity

I was aware of the SAIP program from my participation in the previous year, so I applied to the program again this year. I was fortunate enough to be selected by my previous mentor, Ian Kappes, to work with NE-A5 once again.

Work done on this project

The project, being the development of resource management applications, consisted entirely of my own effort. From deliverable requirements provided by my mentor, and some functional requirement additions generated through design reviews, it was my responsibility to implement the requested features as well as possible, given the resources available. For the most part development work consisted of database programming and functional testing using real resource data.

Additional projects I worked on included some firing room console training, configuring the new NE-A microcontroller development lab network, mentoring high school CubeSat students, and managing the NE interns' component of the mentor appreciation ceremony.

Influence on academic and career goals

Through discussions with my mentor regarding his career and academic history, I have begun to rethink certain aspects of my career plan. Entering the program this summer, I knew I wanted to work with digital systems development in the aerospace industry. However after learning about my mentor's experiences with co-op programs, I decided that I need more experience in more specific technical fields in aerospace. Specifically, I currently only have a general idea of what I want to do, which could be troublesome when actually applying for positions post-graduation. I now believe that I need to take more work experience opportunities to develop a clearer picture of my planned career path, and taking on a co-op is what I plan to do next.

Conference and workshop presentations

The only presentation of my work has consisted of demonstrations to staff and management within NE-A. Through these demonstrations I received input regarding alterations and improvements to my project, all of which have proved useful. At project completion, I will be presenting my work to the NE-A section chief, with some of the other branch chiefs and end users in attendance.

Publications

No publications were produced in relation to this project.

Personal quote(s) of your experience on the project

The more you step outside your box, the more destinations you can see beyond what you knew existed. By understanding not only the technical aspects of your field of study, but how it interacts with other fields, you gain a more comprehensive idea of what future opportunities exist.

Future career plan outlook

I will next be looking into co-op opportunities at NASA and other aerospace institutions as a result of discussions with my mentor. This way, I can gain a broader understand of the various applications for my field of study and better define where I want to go next in my career plan.

Consent for Use of Information

I, Christopher Upchurch, grant the NASA Florida Space Grant Consortium the right to use portions of the content from my report to showcase my project to our State's Congressional delegates and NASA HQ.