

sdmay19-20: MicroCart (Microprocessor Controlled Aerial Robotics Team)

Week 3 Report

September 3 - September 10

Client/Advisor: Dr. Phillip Jones

Team MembersJames Talbert — *Quad Hardware*Nina Moriguchi — *Flight Simulation*Tina Li — *Quad Software*Tony Bertucci — *Ground Station*Sarah Koch — *Controls***Summary of Progress this Report**

We met with the previous year's team to understand the current status and evaluate what results we could use, and what still needed work

Pending Issues

We are working with the old team to resolve an issue from the end of their project involving delays on the camera data being relayed to the quad, causing unexpected behavior in the control loop. Additionally, there are some issues controlling the quad manually.

Plans for Upcoming Reporting Period

We have a demonstration for the ECpE scholars fair on Tuesday, and we plan to dive into the documentation in the repository to understand how we should go about performing our technical roles on the team (this will likely extend past the next period).

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
James Talbert	James has begun reading the documentation the previous team left behind and working with the current team to decide on where to take the project. Additionally, he integrated the GitLab activity log script into the MicroCART repo.	5	5
Nina Moriguchi	Nina has begun reviewing the previous teams code for the CI tests, Unity tests, and Simulink model as well as participating in group brainstorming and goal making.	5	5
Tina Li	Tina has been reviewing documentation and understanding how the quadcopter works, control theory, etc.	5	5

Tony Bertucci	Anthony has begun reviewing all previous documentation for the product, as well as reviewed previous product reports done by teams in recent years. In addition, he has also started to familiarize himself with ground station systems as well as how the frontend and backend are separated/connected	5	5
Sarah Koch	Sarah has been reviewing the documentation from the previous team and is communicating with them to set up hand-off meetings. She has also begun reviewing the LQR control model that was developed last year but not tested.	5	5

Gitlab Activity Summary

skoch **joined** the project, Sun Sep 09 2018

ninam **joined** the project, Sun Sep 09 2018

mkelly2 **pushed** a commit, Fri Sep 07 2018
Reverting vrpn changes

James Talbert **joined** the project, Fri Sep 07 2018
