

sdmay20-47: Real Time Volumetric Analysis

Week 1 Report

September 9 - September 21

Team MembersKenneth — *Team Leader*Alain — *Chief hardware developer*Dan — *Chief software developer*Luke — *Chief interface developer*Max — *Chief backend developer***Summary of Progress this Report**

We have spent these first couple of weeks to familiarize us with the project goals and ideas given to us by the client. We have met with people who will be working on their parts of this project in addition to our main goal and reviewed some of the previously developed iterations of the project. We have met with a representative of a last year's team and discussed what they have achieved, what they have encountered, and what implementation details they did use. We have also set up most of our work environment in the lab and worked a bit on a hardware part of the project. Closest goals are set up and roles are divided.

Pending Issues

Present frontend communicates command to the backend via an unidentified part of code. Installed versions of Gazebo are not the same (may be an issue). Hector Quadrotor we are going to use is still not tested with previous version of CyDrone. Built old version of CyDrone is still not transmitting feed to the frontend.

Plans for Upcoming Reporting Period

Fully set up ROS environment with Gazebo and Hector-Quadrotor.

Find out how the frontend of CyDrone communicates with the backend.

In CyDrone backend replace ArduPilot with Hector-Quadrotor and make it work with the simulation environment.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kenneth	Communication with the client, setting up and holding meetings, working with backend simulation environment	6	
Alain	Understanding hardware, working with one of the grad. students to figure out existing hardware	6	
Dan	Attending meetings with the Client and with old team, setting up work environment,	7	

	understanding the CyDrone project		
Luke	Attending meetings, understanding frontend mechanics, understanding GZweb	6	
Max	Attending meetings and understanding requirements for the simulation, understanding how ROS and Gazebo work, practicing	6	

Gitlab Activity Summary

Nothing to report.
