Senior Design May 22, 43

MicroCART Senior Design Team

Week 24 Report

April 18 - April 25

Faculty Advisor: Philip Jones

Members:

Ryan - System architect

Zach - Groundstation lead, co system architect

Reid - Test station sub-team

Ellissa - GUI sub-team

Colton - Git manager, Firmware lead

Carter - Web Master, OptiTrack Lead

Brandon - Project Lead, Test Station lead

Summary of Progress this Week

- Completed documentation of variable infill 3D printing process and recorded drone flight with wand remote Brandon
- Vr demo working with roll and pitch of controller, optionally switch to height hold mode by clicking touch pad. Not currently running in thr MicroCART ground station Colton

Pending Issues

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Individual Contributions

Team Member	Contributions	Weekly Hours	Total Hours
Brandon Cortez	- Completed documentation of variable infill 3D printing process - Documented and uploaded videos of drone	4	153

	flight with wand remote		
Reid Schneyer	- Worked with Josh from 488 to extend crazyflie GUI & demo with VR wand	6	140
Colton Glick	 Modified light house demo to use orientation of controller to control roll and pitch of drone. Learned openVR API to get controller position and button presses 	9	234
Ellissa Peterson	-		95 + _
Ryan Hunt	- Added documentation on gitlabwiki about GUI - continued working on poster	6	162
Carter Irlmeier	- Uploading YouTube videos, looking at lighthouse demos and documentation done by Colton	2	80
Zachary Eisele	 Implemented serial communication with boost asio and low level C Continued working on setting up multiple drones and position setpoints in GUI 	8	236

Comments and Extended Discussion

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Plans for coming Week

- Work on gitlab documentation, finish poster Colton
- Finish GUI documentation, Finish final document Ryan