**EE CprE SE 492 – MAY1732**

**Crazyflie Swarm Senior Design Team**

**Weekly Report 13**

**4/17-4/24**

**Faculty Advisers**

Phillip Jones

Nicola Elia

|  |  |  |  |
| --- | --- | --- | --- |
| **Member** | **Position** | **Weekly Hours** | **Total Hours** |
| **Nick Robbins** | **Team Leader** | **15** | **182.5** |
| **Ben Nelson**  | **Key Concept Holder** | **2** | **164.25** |
| **Jake Frazier-Flores** | **Webmaster** | **13** | **173.25** |
| **Grant Manley** | **Key Concept Holder** | **5.5** | **146** |
| **Chengrui Yang (Roy)** | **Key Concept Holder** | **4** | **96.5** |
| **Cole Beaulieu** | **Communicator** | **14** | **183.5** |
| **Tianxiang Shen (Jesse)** | **Key Concept Holder** | **2** | **63** |

**This Week’s Progress**

1. Quads/Camera System
* Worked to get manual flight as smooth as possible, and emulate that into the groundstation.
1. Ground Station/Wifi Systems/Firmware
* Troubleshooting uart connections on the CF as well as writing and testing new network firmware for the ESP modules.

**Pending Issues**

1. Solving the pending UART connection on the CF issue
2. Working with our advisors to think of any last minute plans that could help institute autonomous flight

**Plan of Action**

1. Cole – one final attempt at autonomous flight
2. Nick – also one final attempt at autonomous flight
3. Jake – continue troubleshooting communication stack and the UART on the CF, and implementing network
4. Grant – presentation work
5. Chengrui ­– presentation work
6. Tianxiang – presentation work
7. Ben – help Jake with his troubleshooting

**Individual Contributions**

Cole:

* Monday: 3 hours – meeting, working to tune the quad manually
* Wednesday: 3 hours – continued tuning
* Thursday: 1 hour – continued tuning
* Friday: 3 hours – working to try finalize hand tuning so we can attempt autonomous flight
* Sunday: 4 hour – weekly report, final document and working to fly autonomously

Nick:

* Monday: 3 hours – meeting, working to tune the quad manually
* Wednesday: 3 hours – continued tuning
* Thursday: 1 hour – continued tuning
* Friday: 3 hours – working to try finalize hand tuning so we can attempt autonomous flight
* Sunday: 5 hour – final document and working to fly autonomously

Grant:

* Monday: 2.5 hours – meeting and getting items. Ready for final review and redoing poster
* Wednesday: 1 hour – working on final report
* Sunday: 2 hours – final report

Jake:

* Monday: 2 hours – meeting, manual flight testing for big quad
* Tuesday: 2 hours- troubleshooting uart connection on crazyflie
* Wednesday: 1 hour – testing manual flight and tuning pid values for big quad
* Thursday: 3 hours – testing manual flight and tuning pid values, trouble shooting uart connection on crazyflie and writing network firmware for esp modules
* Friday: 1 hour – testing manual flight and tuning pid values for big quad
* Sunday: 4 hours – troubleshooting uart connection on crazyflie

Ben:

* Sunday: 2 hours – Working on final document

Tianxiang Shen:

* Monday: 1 hour – attended weekly meeting
* Sunday: 1 hour – reviewed and revised the presentation and final report

Chengrui:

* Monday: 1 hour – group meeting
* Wednesday: 1.5 hours – help testing flight and tuning
* Sunday: 1.5 hours – help do final report