

Weekly Report

May15-27

S2 Week 4 (2/2/15 – 2/8/15)

Advisors: Dr. Jones, Dr. Elia

Team Members:

Alberto Di Martino * Team Co-Web *
Dylan Gransee * Webmaster *
Robert Larsen * Team Leader *
Ian McInerney * Team Key Concept Holder *
Aaron Pederson * Team Communications *
Rohit Zambre * Team Secretary *
Fengxing Zhu * Team Comm. Co-leader *

Weekly Summary

A few issues with the control function running on Eris have been resolved, as well as some of the minor networking issues involved. We have tested Eris balancing the pendulum and it works quite well.

Pending Issues:

- Need a hard drive for backing up the linux pc (I believe we were going to borrow Paul's)
- We need logging on Eris to investigate behavior

Individual Contributions:

Aaron:

- Met with MicroCART team to update them on data logging software

Alberto:

- Researched and founded different option for rotary actuators with feedback.

Dylan:

- Fixed the timestamp issue
- Finished fixing the networking issues as well as tested them on Eris
- Updated website

Fengxing:

- Corrected mistakes on derivation of model

Ian:

- Characterized the old GAUI ESCs, original DJI, and the new firmware on the DJI

Robert:

- Finished fixing bugs in control algorithm

- Did simple tests with pendulum, examining response

Rohit:

- Modifying Data Analysis Tool functions and scripts to incorporate a new format of the MATLAB data structure.
- Working on converting quaternions to euler angles.

Next week goals:

Aaron:

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Alberto:

- Write C program to test magnetic rotary encoder AS5048A (we are waiting the arriving of the evaluation board)

Dylan:

- Get a hard drive for backing up the linux pc
- Work on relocating omnibot codebase

Fengxing:

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Ian:

- Flash another ESC with the new firmware and check the consistency of the firmware response
- Research brushless gimbal motors for the bottom actuator

Robert:

- Work on creating an ISE project and compiling to see if it works
- Work with Rohit on adding data logging on Eris

Rohit

- Finish off modifications to incorporate the new data struct format.
- Get a good deal of documentation done on the wiki.

Work Hour Totals:

Team Member	Weekly Hours	Running Total
Aaron	2.30	131.80
Alberto	4.00	130.50
Dylan	6.50	171.00
Fengxing	7.50	119.00
Ian	7.50	142.50
Robert	9.50	141.50
Rohit	6.50	126.00