Weekly Report   **May15-27**   **S2 Week 2** (1/26/15 – 2/1/15)

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

Eris can now control the pendulum! Thorough testing will be needed to root out any bugs, and the system needs some improvements, but is functional. Ian is working on testing the flashed ESC, but is having issues with the speed output not being linear. Feng has not reported what he has done.

Pending Issues:

- Flashed ESC is not producing linear speeds
- Network ports don't close right away
    - Requires changing port and recompiling every time Eris is stopped at present

Individual Contributions:

Aaron:

- Helped test the system running on Eris
- Worked on GUI data formatting

Alberto:

- Converted and uploaded Documentation to Wiki
- Researched linear actuators

Dylan:

- Finished getting Eris to receive VRPN data

Fengxing:

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Ian:

- Continued tests on flashed ESC

Robert:

- Finished implementing control function
- Tested control function
- Created controls to tune PID values while system is running

Rohit:

- Perused the format in which the data is being stored in the camera log files
- Researched for existing MATLAB functions to parse OptiTrack Tools camera log files.
    - Research successful
- Obtained two new log files: one with ONE trackable and another with TWO trackables
- Modified the researched MATLAB function to work with our camera log files. Also, made the current format a little more user friendly and easily readable

Next week goals:

Aaron:

- Test sensors if they come in
- Research options for rotary actuators

Alberto:

- Finish Wiki
- Help researching rotary actuators

Dylan:

- Improve VRPN connection
    - Currently have issues with network sockets not closing

Fengxing:

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Ian:

- Determine why ESC speed is not linear
- Test with load to see if that linearizes speed

Robert:

- Fix any bugs in control algorithm that show up
- Improve code quality and readability
    - Command line UI controls are scattered throughout functions; would like to change this

Rohit

- Implement a file sharing system
- Complete documentation for the Data Analysis portion of the wiki

- Help Dylan and Robert with Data Logging functionality on Eris

Work Hour Totals:

Team Member	Weekly Hours	Running Total
Aaron	-	129.50
Alberto	2.00	125.50
Dylan	8.00	164.50
Fengxing	-	111.50
Ian	7.50	135.00
Robert	7.00	132.00
Rohit	4.00	119.50