Weekly Report

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

We are nearing getting the VRPN data to Eris and putting the PID algorithm on it. We've also found that the 2009-2010 team did have modified source for the SoftDMC module on the Mesa board. Hopefully we can add hardware to this so that the existing system (allowing the driving of Eris) can remain in place. The pole for the pendulum was out much of the week getting a finishing touch so that the quad can be mounted on top.

Pending Issues:

- Jitter in system still needs to be diagnosed
- Need to get VRPN data to Eris and PID algorithm implemented
- Need to figure out how to compile new source code for Mesa board

Individual Contributions:

Aaron:

• Worked with Rohit on GUI integration of analysis tool

Alberto:

• Had pendulum finished so quad could be mounted

Dylan:

• Prepared for implementing communication of VRPN data to Eris

Fengxing:

• Work on 2-D model for pendulum system

lan:

- Examined ESC
 - $\circ \quad \text{Found break out headers} \\$

o Found that people have worked with them before

Robert:

• Found 2009-2010 teams modified SoftDMC source

Rohit:

• Finished plotting functions for custom vectors

Next week goals:

Aaron:

- Finish helping Rohit with analysis tool
- Help with jitter analysis of pendulum

Alberto:

• Analyze pendulum system to solve jitter issue

Dylan:

• Finish communication of VRPN data to Eris

Fengxing:

• Test 2-D system

lan:

• Solder leads onto ESC and flash them

Robert:

- Implement PID algorithm on Eris
- Determine how to modify and compile code for Mesa FPGA

Rohit:

- Finish work with Aaron on analysis tool.
- Write a script to parse data from tracking tools CSV log

We also need to add what is needed to the wiki and make sure it is linked from the website.

Work Hour Totals:

Team Member	Weekly Hours	Running Total	
Aaron	8.50	126.50	
Alberto	5.50	114.50	
Dylan	3.00	144.50	
Fengxing	8.00	104.50	
lan	4.00	121.50	
Robert	5.00	114.50	
Rohit	8.50	111.50	