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've managed to implement the needed VHDL, so the system can now drive and balance the pendulum at the same time.

## **Pending Issues:**

### **Individual Contributions:**

Aaron:

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Alberto:

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#### Dylan:

- Finished and tested the demo for a square step response
- Wrote code to drive ground robot wheels while running the quad motors
- Tested the robot while driving the base

#### Fengxing:

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#### lan:

- Fixed PWM frequency issue
  - o Propeller ESCs now use 430Hz and Eris motors now use 28kHz
- Helped test driving and balancing at the same time

#### Robert:

- Worked on getting wheels to work
  - o Found frequency issue
- Reread old teams documentation and found a diagram sort of explaining the changes they made to VHDL
  - o Using this, recreated the VHDL
- Tested driving and balancing at the same time

#### Rohit:

• Worked on documentation and poster presentation

# Next week goals:

## Everyone:

- Finish Documentation
- Finish final report
- Update presentation

## **Work Hour Totals:**

Note this report goes from 4/13 to 4/26.

| Team Member | Weekly Hours | Running Total |
|-------------|--------------|---------------|
| Aaron       | 6.00         | 193.80        |
| Alberto     | 3.00         | 169.50        |
| Dylan       | 27.00        | 258.00        |
| Fengxing    | 1.00         | 164.00        |
| lan         | 11.50        | 211.50        |
| Robert      | 31.50        | 228.50        |
| Rohit       | 8.00         | 178.00        |