

## EE 491 Weekly Report

May15-27

Week 2

9/8/14-9/14/14

Advisors: Dr. Jones, Dr. Elia

Team Members:

Alberto Di Martino

Dylan Gransee \* Webmaster \*

Robert Larsen \* Team Leader \*

Ian McInerney \* Team Key Concept Holder \*

Aaron Pederson \* Team Communications\*

Rohit Zambre

Fengxing Zhu

### Work Hour Totals:

Team Member	Weekly Hours	Running Total
Alberto	5	8
Dylan	8	11
Robert	8	11
Ian	7	10
Aaron	4	7
Rohit	4	7
Fengxing	4	7

### Weekly Summary

#### Meeting Notes:

09/09/14 –

Duration: 2

Members Present: All

#### Purpose and Goals:

- Become familiar with the equipment and software systems in the lab.
- Retrieve any Repository data to be reused for testing and in future applications.

#### Achievements:

- Successfully learned the process of demoing the quad copter.
- Downloaded repository files from computers to back up and look through to help understand the system.

## Meeting Notes:

09/11/14 –

Duration: 1 Hr.

Members Present: Alberto, Robert, Dylan, Ian, Rohit, Fengxing

### Purpose and Goals:

- Touch base with advisers and graduate student.
- Find out next step

### Achievements:

- Found our next step of the project:
  - 1) Divide and conquer: You should split into sub groups for now one to work on the omnibot stuff and one to understand how the quad demo currently works including the code. The goal here is to have one an idea of how things work and the feasibility of the omnibots by October.
  - 2) When you are working on the design start small and make use of what is already done to give you a better chance of success
  - 3) TEST! make sure you test all your sub-components as you build them so that when you move to the next step you will know where issues are. Also come up with a way to have everyone in the group be aware of any bugs in the system.
  - 4) Keep your options open, you don't have to remain on one path, competing design ideas are good

## Meeting Notes:

09/14/14 –

Duration: 2.5 Hr.

Members Present: All

### Purpose and Goals:

- Split projects in to smaller tasks and assign members to those tasks
- Decide a project name
- Learn how to use Pivotal Tracker
- plan repository organization

### Achievements:

- planned repository organization scheme:
  - /Datasets
  - /Hardware
  - /Firmware
  - /Software
  - /MATLAB
  - /Production
  - /GeneratedDocumentation
- Divided projects in to tasks and assigned members
  1. Testing System – (Fengxing, Rohit)
    - a. Collect data
    - b. Output logfiles

2. Omnibot Revival(By Oct. 1) – (Robert, Dylan)
  - a. Get omnibot demo working if possible.
3. Control Theory – (Ian)
  - a. How does the quad copter work on a pendulum
4. System acclimation – (Alberto, Aaron)
  - a. Setup manual
  - b. Documentation for demo
  - c. Required files for setup
  - d. Find out if we need to reprogram

### **Pending Issues:**

1. We don't know how we could be able to collect data.
2. The quad copter is difficult to get working.
3. We are unsure whether the omni bot will be sufficient let along work with existing resources.

### **Plans for next week:**

- Fengxing, Rohit: Talk with sister group and professors to discuss how to approach creating the new testing system.
- Robert, Dylan: Work on getting omnibot to operate.
- Ian: Find out control Theory.
- Alberto, Aaron: Get the quad copter demo working and find tracking demo.

### **Individual Contributions:**

Rohit – 4 Hours

Alberto – 4-5 Hours

Fengxing – 4 Hours

Aaron – 4 Hours

Robert – 8 Hours

Dylan – 8 Hours

Ian – 7 Hours