

Date: 04/01/2014

Group Number and Name	DEC14-08 / PUMA ROBOT
Client/Advisor	Dr. Greg R. Luecke
Attendees/Role	Alex Grieve / Webmaster Matt Bogenschultz / Lead Nhat Pham / Communications Zeyu Zhang/ Key idea holder

Past week accomplishments

What was done, who did it, and when it was done

A: The entire group met with Dr. Luecke, and he went through what bits of information we were missing from our project understanding, ie. how to implement and connect our PID controller(P only in our case), DAC, H-bridge. Went through the input and output of our P controller and how we can relate the output voltage value with a desired torque value.

B: We ordered 2 Motenc Lite Boards.

C: Nhat got parts order for H-Bridge prototype.

D: Nhat and Matt did some tests on the motor's encoder. We found that the system is called the quadrature encoder. Basically this system will output 2 pulse signal, and the offset phase will determine the direction of the motor.

E: Alex received code from Dr. Luecke, and is in the process of analyzing the code. He is also in the process of looking at code for the Motenc Lite Boards.

Plan for coming week

What to do, who, and when should it be done

A: Once parts for h-bridge arrive, Nhat will breadboard a prototype h-bridge to do some testing. Also, we will implement a logic circuit to avoid short circuit when both sides of the H-bridge get triggered from machine bugs or machines failure.

B: Matt will talk to advisor in detail about PID controller.

C: Zeyu will do further research into the quadrature encoder, as well as encoder counter circuit or device.

D: Alex will continue to analyze code and try to have a simple program written by the time the Motenc boards arrive later in the week.

Pending Issues

A: Waiting for parts to breadboard H-bridge circuit. (Parts have been ordered)

B: Understanding encoder and encoder counter. (assigned to Zeyu)

C:

Individual Contributions

A: See "Past Week Accomplishments" section

B:

C:

Individual hourly Contributions

<u>NAME</u>	<u>Hours this week</u>	<u>HOURS Cumulative</u>
Matthew Bogenschutz/ Leader	6	35
Nhat Pham / Communication	6	38
Alex Grieve / Webmaster	6	52
Zeyu Zhang / Key-Idea-holder	6	26

Comments and extended discussions: