# Progress Report – Week 4

# **Summary:**

So far my partner and I have stayed on schedule. The system block diagram and the system schematic / wiring diagram have been designed. The necessary hardware to begin wiring up our circuit has been determined and acquired. The LabVIEW software environment has been installed on my laptop workstation and familiarity with its programming structure has begun.

#### NOTE:

The motor and motor driver used is not the recommended hardware so there will be more in house planning and designing of the circuit. This may set us a little behind in the following weeks. Our best efforts will be made to stay on the outlined schedule.

### Week 1:

- Proposed Goals:
  - Project Verbal Discussion
  - Design Block Diagram (Due Week2)
  - o Exp1
- Accomplished Work (Before Lab2):
  - Background needed to understand and begin design of control system was understood
  - BlockDiagramRev1 in Simulink
  - Started gathering needed datasheets and design materials
    - MyDAQ DataSheet

#### Week2:

- Proposed Goals:
  - Design Schematic / Wiring Diagram
  - o Exp2
- Accomplished Work (Before Lab3):
  - o BlockDiagramRev2 in Simulink
  - SchematicRev1 Eagle Cadsoft (Due Week 3)
  - Acquired Motor with proper gear ratio. This motor is a LP motor rather than the HP motor recommended
    - Pololu 2282
    - 2.4A Stall @ 6V
  - Started gathering needed datasheets and design materials
    - Pololu2282 Specs

# Week3:

- Goals:
  - o Continue Design of Schematic / Wiring Diagram
  - о Ехр3
- Accomplished Work (Before Lab4):
  - o BlockDiagramRev3 (Final Revision
  - SchematicRev2 Eagle Cadsoft
  - Determined & Purchased proper motor driver for LP motor
    - MC33926
  - o Installed LABView on Labtop and began running Exp1-Exp3 Software

### Week4: