

MCHE 470: Robotics

Fall 2013 - Mini-Project 3a

Assigned: Thursday, October 16th
Due: Friday, October 25th, 5pm

Grading: Each task is P/F worth 1 point.

Assignment: Complete each of the tasks below.

1. Connect the soft potentiometer, your Ardumoto shield, and a DC motor. Vary the speed of the DC motor based on where the soft potentiometer is pressed. Pressing at the “top” of the soft potentiometer should cause the motor to run at full speed and the “bottom” at its lowest speed. See Circuit #10 from the SIK for help with the soft potentiometer.
2. Connect the potentiometer, two servo motors (you should have at least 3 within your group), and the links provided to your group. Have the servos track the position of the potentiometer, so that when the potentiometer is at the minimum of its range (all the way “left”), both the servos are rotated to the left edge of their ranges, and similarly for the right side. “Center” on the potentiometer should center both the servos. See Circuit #8 from the SIK Guide for help using the servo.

Submission: Email to schedule a time for your team to come to my office to demonstrate your solutions.

OR

Email a link to a separate video for each your solutions:

- to joshua.vaughan@louisiana.edu
- with each video containing
 - each team member saying hello
 - one of you pressing the upload button
 - the correct functionality asked for