Comments on Lab #8

The assignment was worth a total of 20 points. 8 for the Software Lab, 6 for the Design Lab, and 6 for the Post-Lab Homework. As announced on the course webpage and in “What to Write for PS 8: Revised for Design lab”, Questions 15 and 16 of lab #8 should be turned in with lab #9.

Software Lab (8 pts.)

Q2 : 2 pts. 2 pts for explanation of code solution. Your explanation should show your understanding about measuring voltage differences and choosing a reference (ground) node.

Q5 : 2 pts. 2 pts for explanation of code solution. Your explanation should show your understanding about the effect of changing voltage polarity on voltage measurement and current directions.

Q6 : 2 pts. 1 pt for each circuit diagram described in circuit.py and circuit2.py.

Q8 : 2 pts. 1 pt for explanation about the approach used for determining the gain, 1 pt for reasonable estimation of the gain.

Design Lab (6 pts.)

Q12 : 2 pts. 1 pt for motor behavior description. 1 pt for explanation.

Q13 : 2 pts. 1 pt for motor behavior description, with mention about the ability to turn in both directions. 1 pt for explanation.

Q14 : 2 pts. 2 pts for accurate circuit diagram with correct range of voltages supplied to the motor terminals.

Post-Lab Homework (6 pts.)

Q17 - 21 : 1 pt for attempting the homework. 1 pt for each question. 0.5 pt deduction for inaccurate resistor or voltage source connections in the Circuit code.