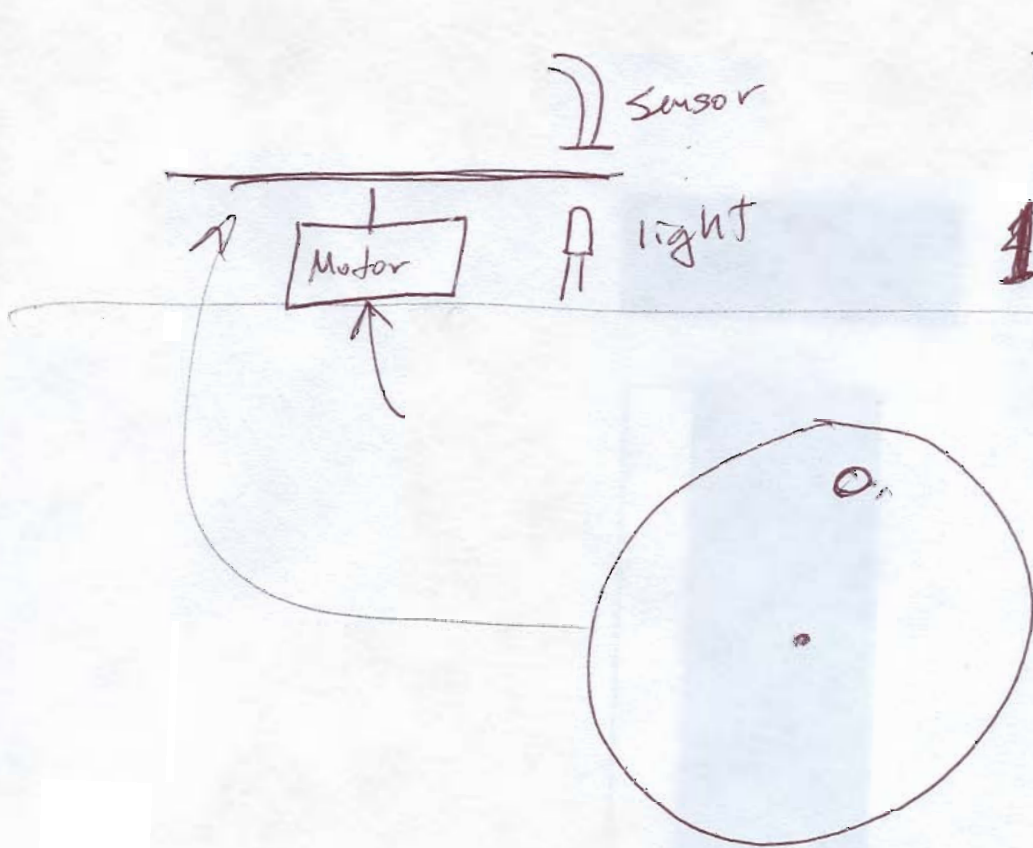


# ECGR 4161 - Extra Notes - 2/23/09

①



4.5V 12000 RPM  
200 RPS

1.5V = ~85 RPS

4000  
60

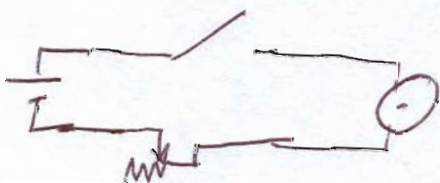
## How to control a motor



Constant RPM



on/off, constant RPM

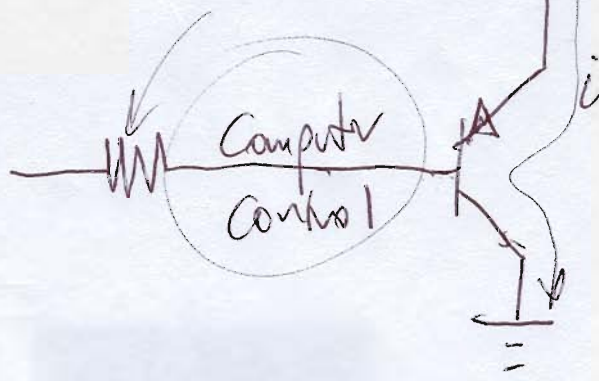
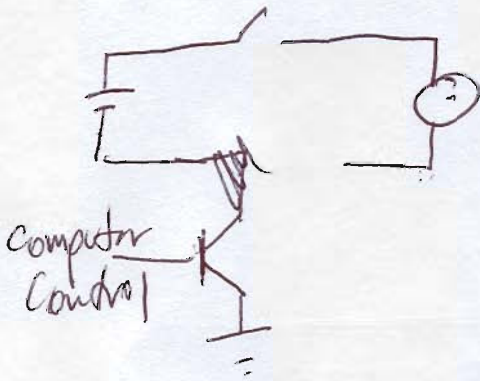


Adjustable (manually) RPM  
on/off

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(2)

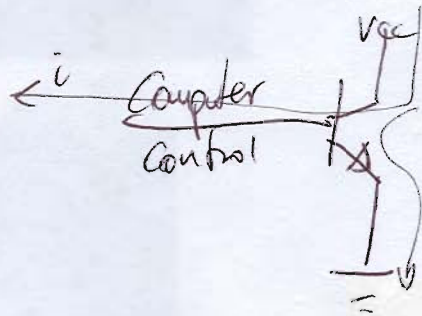


PNP Transistor

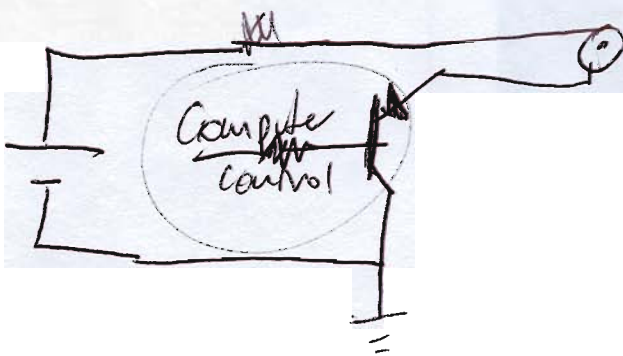
DAC

8 bits  $\rightarrow$

0  $\rightarrow$  5v

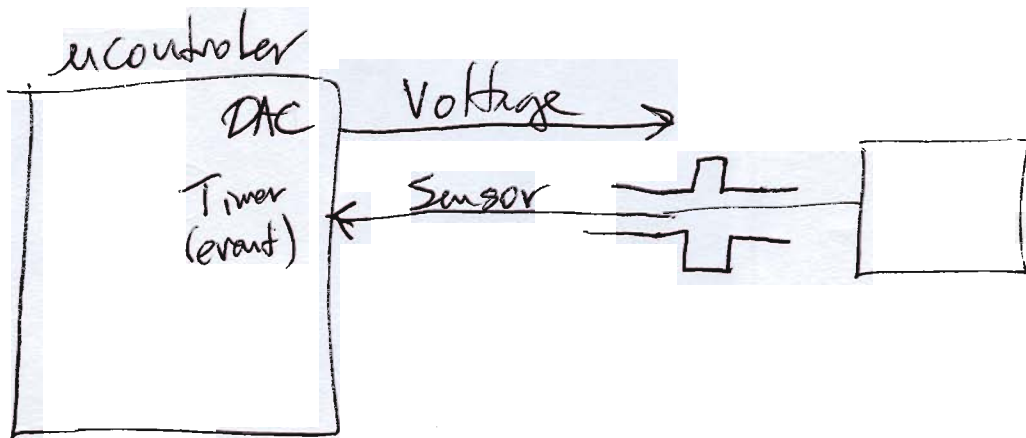


NPN



set speed

measure speed



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(3)

Program:

every 1 second, count the # of events

Goal 100 RPS

# counts TS 6S, then increase voltage

How much voltage



Look at how an H-bridge works  
PWM is also an important topic