

Experiment: Calbot (3)

Wirewrap a touch sensor to your board

First, neatly wirewrap a touch sensor to your board. Use P8_5 as the input port of the touch sensor. Remember to connect a 5K resistor to the touch sensor (refer to Fig. 3 of the Touch Sensor Chapter). When you are done, ask your TA to verify your wirewrap.

Toggling the external LED

Once your TA has verified that your wirewrap is correct, implement the external LED toggling behavior from your prelab. Demonstrate the correct behavior to your TA when you are done.

Motor control

Now add on the motor control to your code above. That is, your motors will both move backward whenever your touch sensor is pressed, and forward otherwise. Demonstrate this to your TA.

The Finale

Once you have the motor control working, simply use the kludgywait function to implement the obstacle avoidance behavior of the Calbot. You will need to use two front sensor to complete this behavior. Have your TA checkoff your project when you are done.