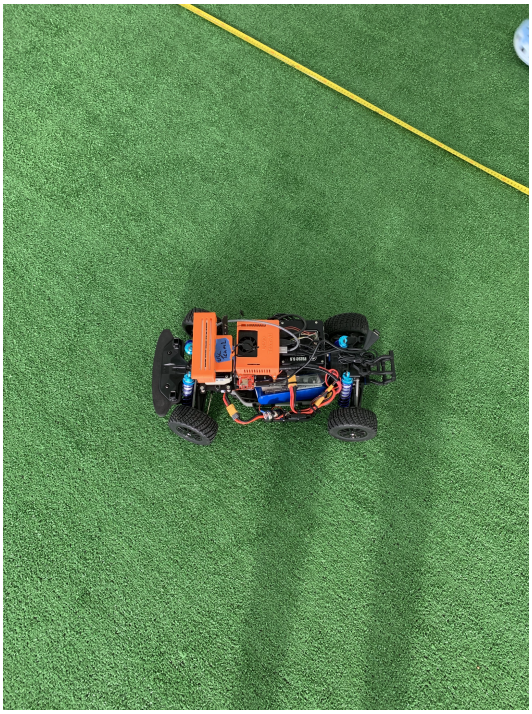
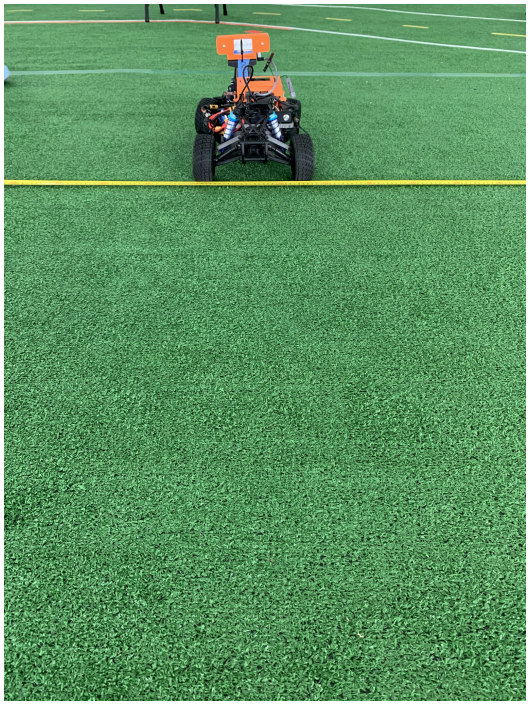
ERPM gain:

1) Go to ~/projects/f110/f110_ws/src/f110_system/racecar/racecar/config/racecar-v2/vesc.yaml
2) Type in ‘nano vesc.yaml’
3) After doing this, get a tape measure and measure it to 2m
4) Set your robot car’s back wheels to the 0m mark
5) Start car and on another tab type in rostopic echo /vesc/odom/pose/pose/position/x
6) Drive car straight to 2.1m (ends on back wheel) and check the rostopic to ensure that it is around 2.1m (0.05-0.076m leniency)
7) Our end value was around 4112.

Mushr Steering Angle Gain:

1) Go to ~/projects/f110/f110_ws/src/f110_system/racecar/racecar/config/racecar-v2/vesc.yaml and keep this tab open so you can update values as needed

2) 

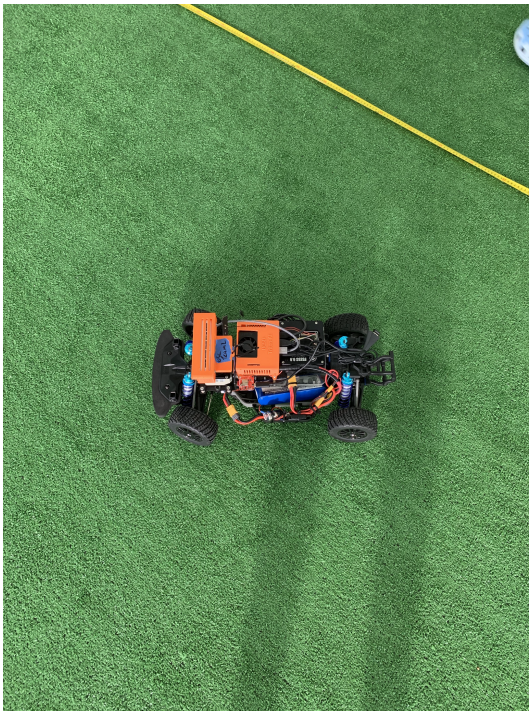


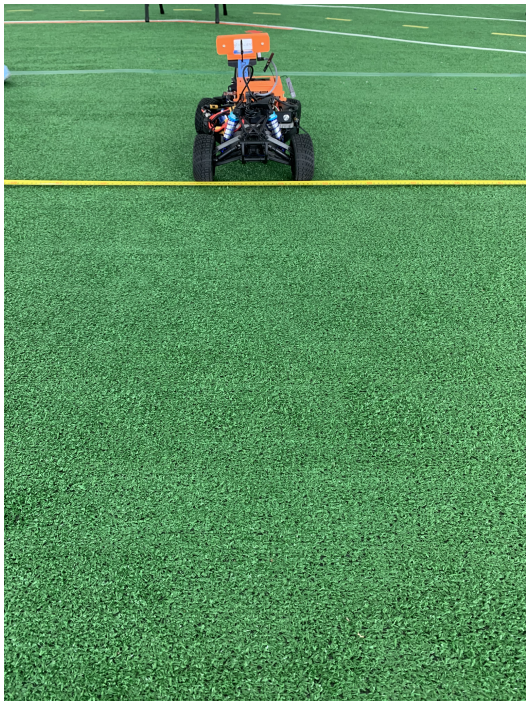
Follow this picture on how to turn. (Our value should be 2.44 though; use 2*radius=Length/2sin(arctan(½*tan(delta)) to confirm (delta is 0.34; length of car is around 0.425)

3) If when you turn your value is too large then you want to increase the gain and if it's too small you want to decrease the gain.
4) End result should be around -0.67 for the small car

Our Steering Angle Guide:

1) Go to ~/projects/f110/f110_ws/src/f110_system/racecar/racecar/config/racecar-v2/vesc.yaml and keep this tab open so you can update values as needed

2) 



Follow these pictures on how to turn. Set your maximum speed to 1m/s and when you drive, the car should drive around 1.8m.

3) If when you turn your value is too large then you want to increase the gain and if it's too small you want to decrease the gain.

4) The end result should be around -1.1.