

# December 3, 2022

coding

**focus:**

Parking autons and strafing

**summary:**

Created and tested the autons for just parking in all starting locations. Tested strafing over long distances. Created function in auton library to accelerate and decelerate in increments (so it doesn't drift when it tries to stop)

**challenges:**

It didn't strafe straight, and it kept drifting. Even float stop didn't help it strafe straight. I created function in AutonLibrary so the robot accelerates and decelerates in increments.

**next steps:**

Test strafing increments in long distances

**focus:**

Ground, low, and high junction strategies for auton

**summary:**

Developed auton path strategies for parking, ground, low, and high junctions. Wrote basic driving/turning code for each of these strategies. Also developed a key for the different parts of the field

**challenges:**

Have to contend with strafing problems and figure out distance travelled

**next steps:**

Add arm and claw code, test, add distances

**focus:**

Encoders

**summary:**

Finished writing code for driving encoders. Fixed any references to encoders in auton.

**challenges:**

No dead wheels attached to the robot (coded encoders for the wrong type of wheel). Constants are wrong. No testing was able to be done.

**next steps:**

Attach deadwheels to robot and test encoders. Code/logic should be ok, so only constants like diameter, tick count, and revolutions need to be changed

**focus:**

arm stuff

**summary:**

I wrote code logic for the arm. I implemented limit switches. I found the conversion factor between rotations and cm. I made controller diagrams

**challenges:**

I didn't have the robot for a while so it was hard to test. Also code I wrote the arm with encoders didn't work

**next steps:**

configure limit switches so i can test that part of code. Check to make sure the conversion factor is correct. Figure out why encoders code didn't work.

**focus:**

Engineering portfolio

**summary:**

today we spent time updating the engineering portfolios. We made a new google doc for each team to lay out all the important information we want to include, and we start adding it to canva soon. We also vlogged our meeting.

**challenges:****next steps:**

continue EPs