

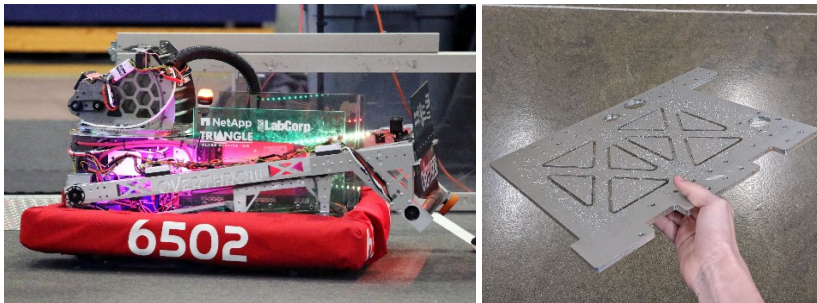
TREVOR M NELSON - PORTFOLIO

3D PRINTER



Purchased and modified a Creality Ender 3 Pro to print much better than it did out of the box. I replaced the control board, optimized the part cooling fan duct and filament entry angle using 3D printed parts, managed loose cables, and performed a multitude of calibration steps, leading it to perform like a much more expensive printer.

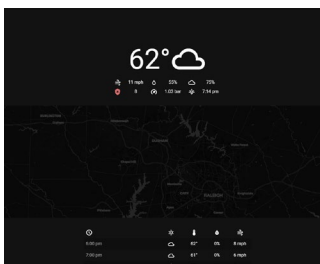
OVERTHROW



In action: <https://youtu.be/V2W0Gz72hl4>

A FIRST Robotics Competition robot built during the 2020 season with a team of 20-30 others. I wrote a significant portion of the code, including code to aim the 360° turret based on camera input while also selecting and maintaining the correct flywheel velocity to automatically sink almost every shot we took. I also designed and assisted with manufacturing certain parts, an example of which is pictured above. I also helped construct similar robots in 2017, 2018, and 2019.

RAINCHECK



A minimal weather webapp inspired by Dark Sky developed in my free time. Includes current conditions, hourly and daily forecasts, and radar.

I have a variety of less significant projects not included in this document that I would be glad to discuss.