**TrayBot Version 1**

Goals:

* Holds 9-10 cubes
* Skinnier drive ()
* Push mechanism on the back
* Build 2 stage with metal slider mechanism
* Rollers that are effective (smaller tread and smaller sprockets)
  + 2 different sized sprockets to have a better angle when intaking cubes

Plan:

* Measure precise length for the drive (using the field)
* Build simple drive (but leave room for position tracking encoders)
* Attach rotational part on the base (up front)
  + Uses hinges or pillow bearings
* Make 2 stage flip out mechanism (no sliders yet)
* Attach towers based on the angle for the tray
* Place the motor in a position (connected to the gear) where both bars lift up
  + Don’t use high-strength axles
* Start building the 2-bar lift
  + Box up the top part of the 2-bar lifts to prevent bending of metal
* Start building the rollers on the 2-bar lift
* Build anti-tips