

WELCOME TO

VEX IQ[®]
ROBOTICS

MASTERS

Levels of Robotics



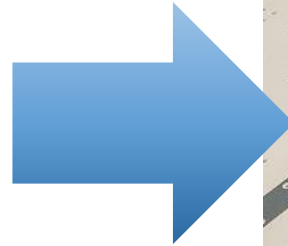
Level 1 – Building from instructions

Level 2 – Modeling others

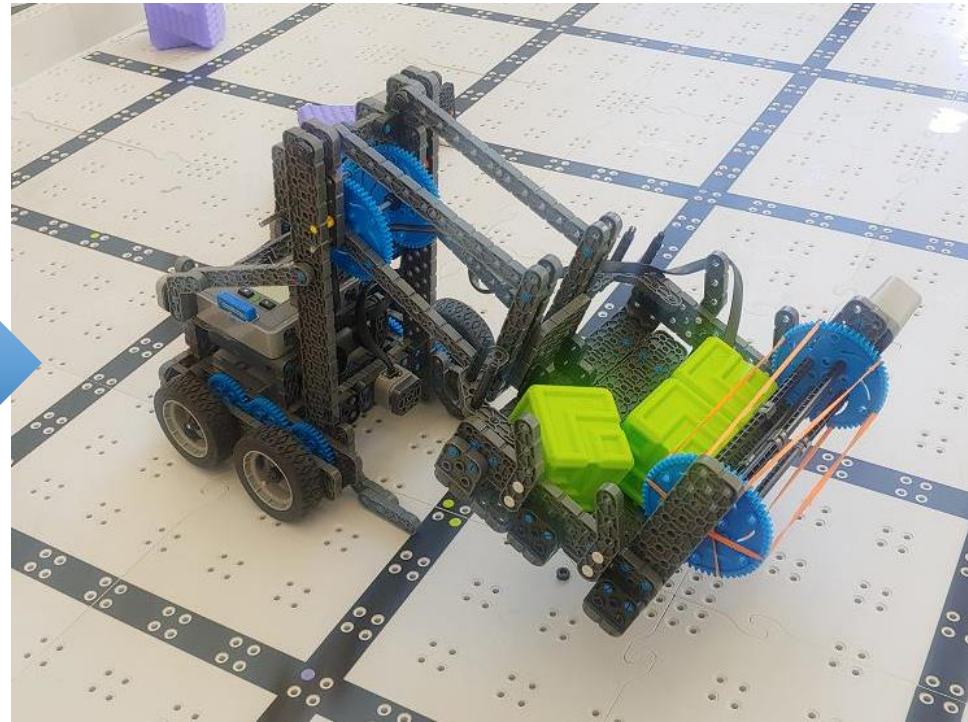
Level 3 – Building & inventing based on experience

Samples of robots – Level 1

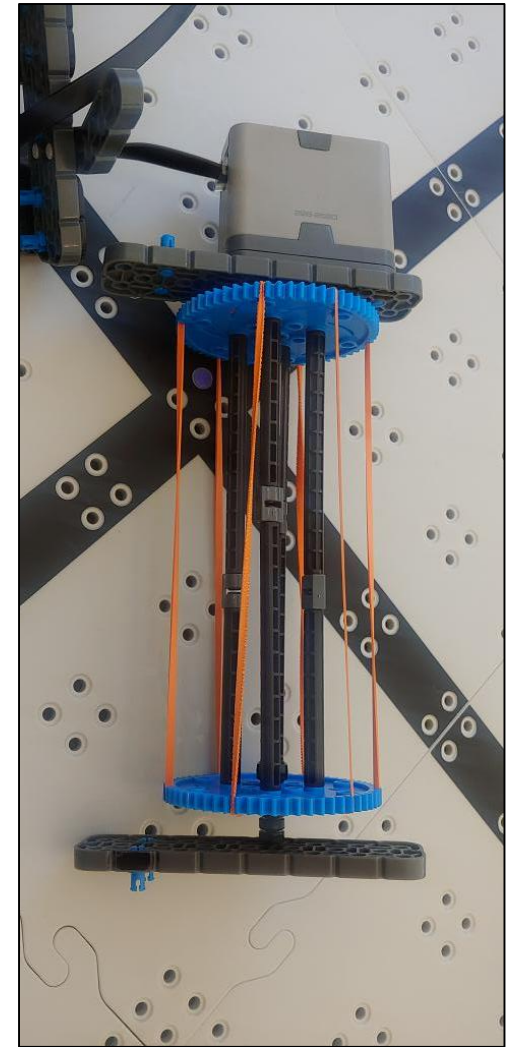
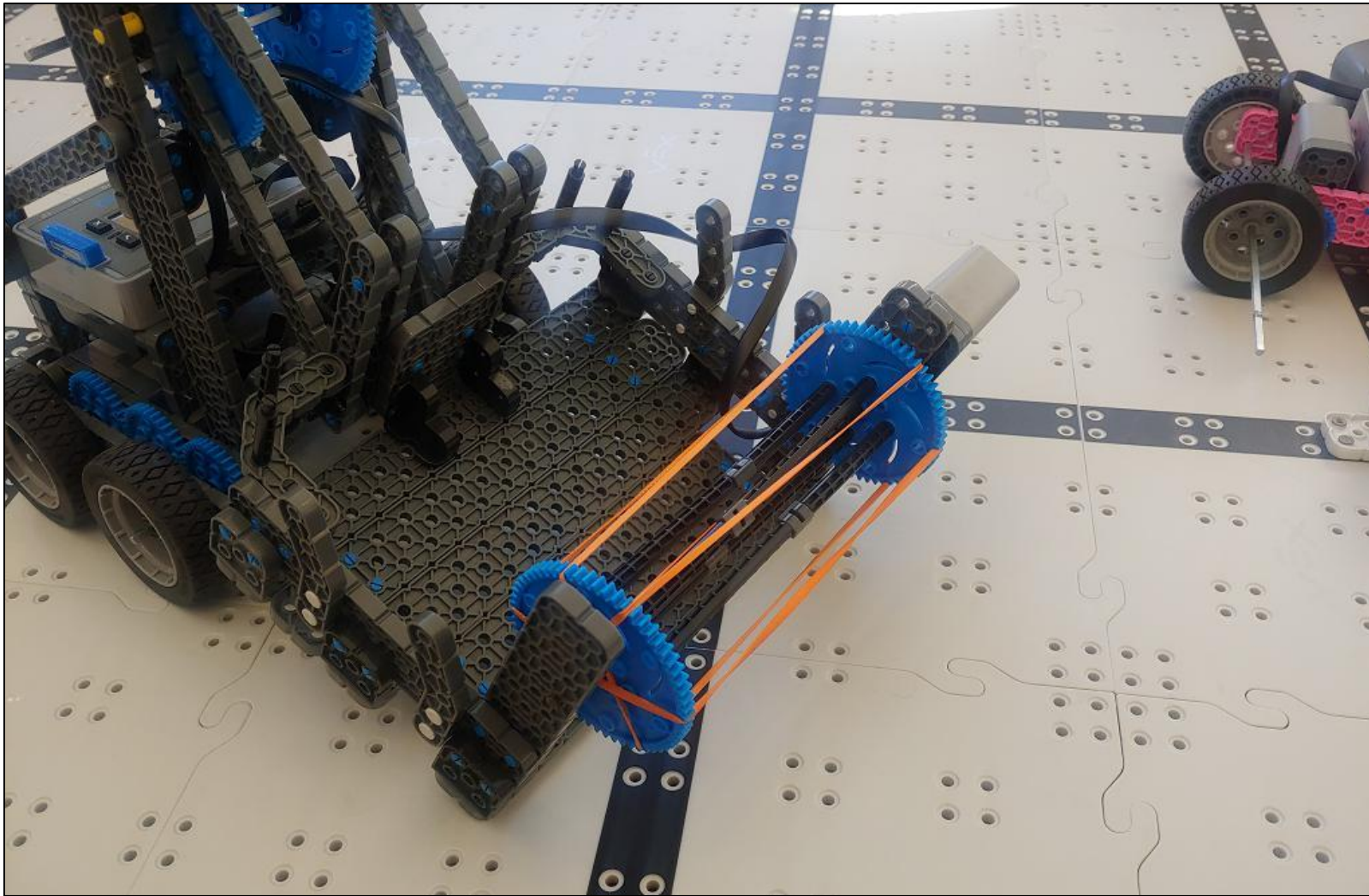
Take what you have...



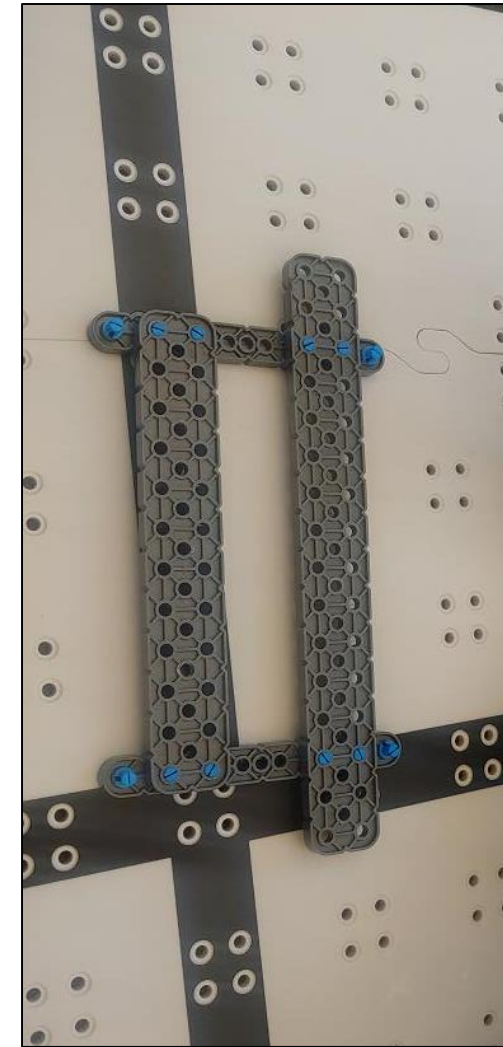
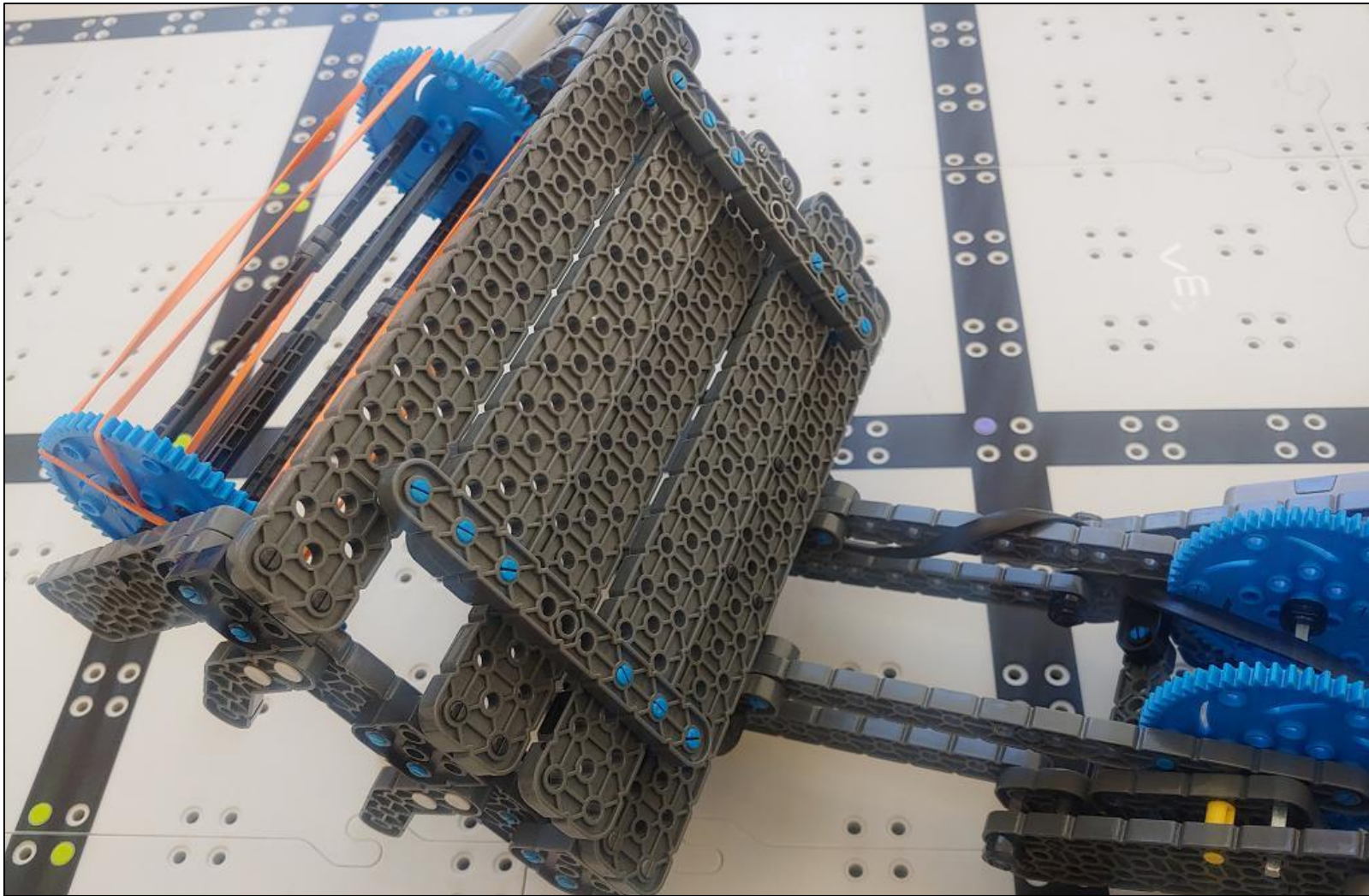
And make it even better!



Breaking it down...



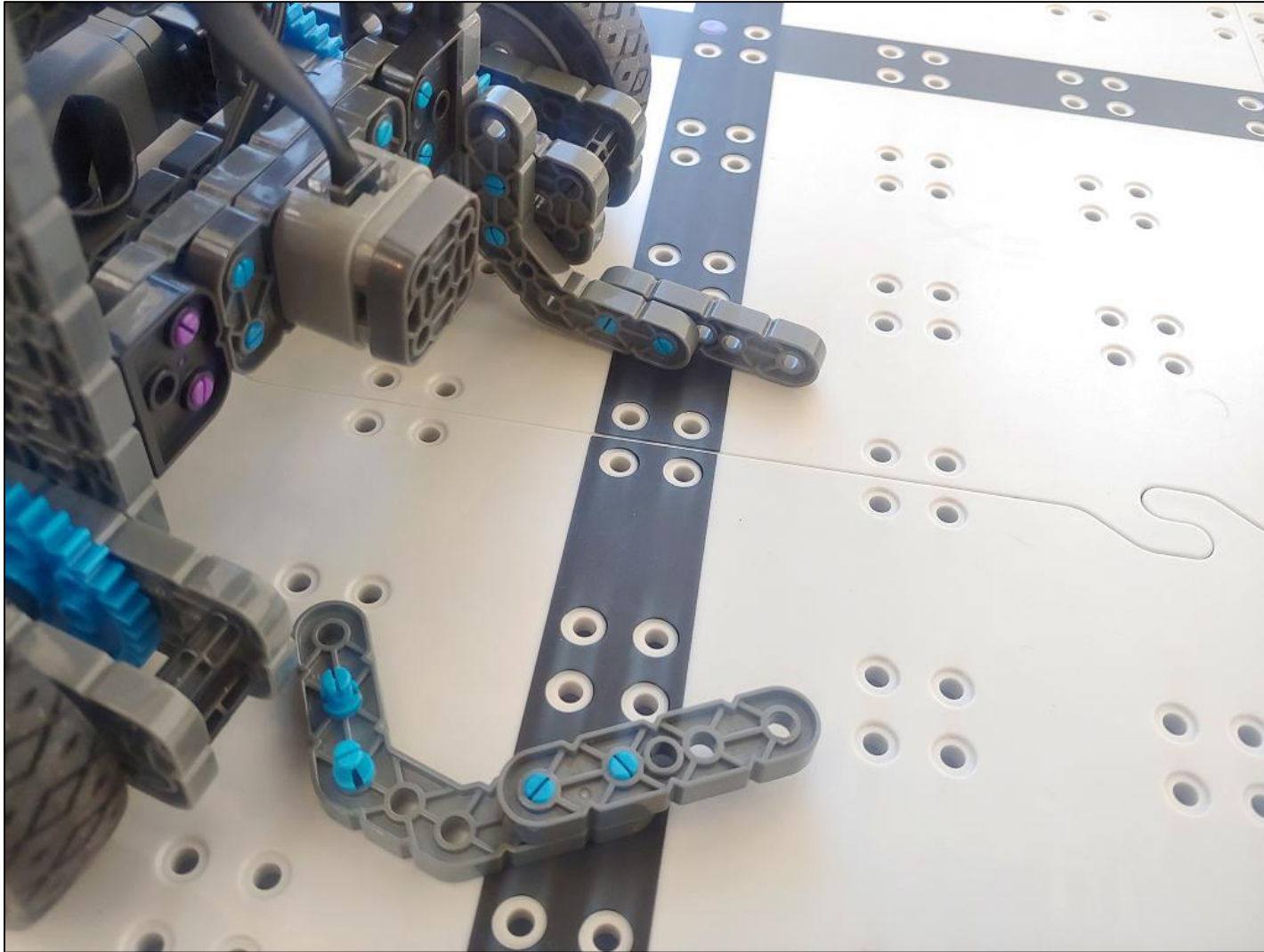
Breaking it down...



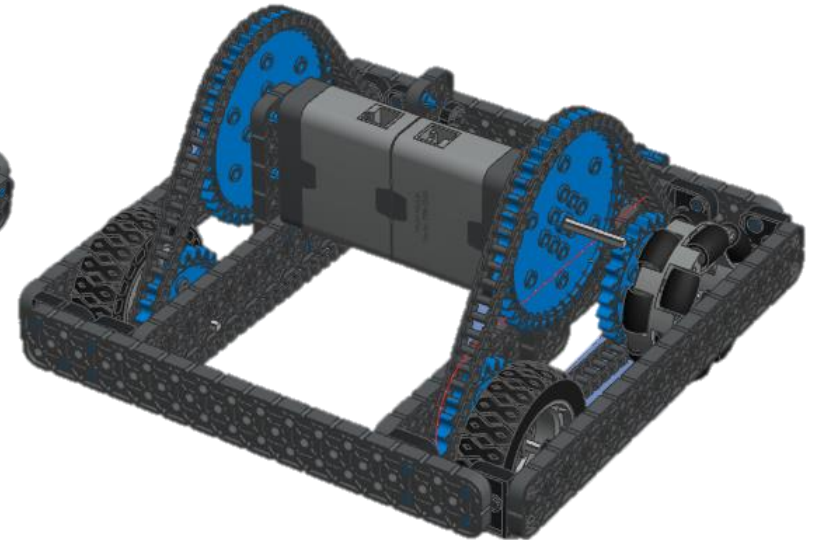
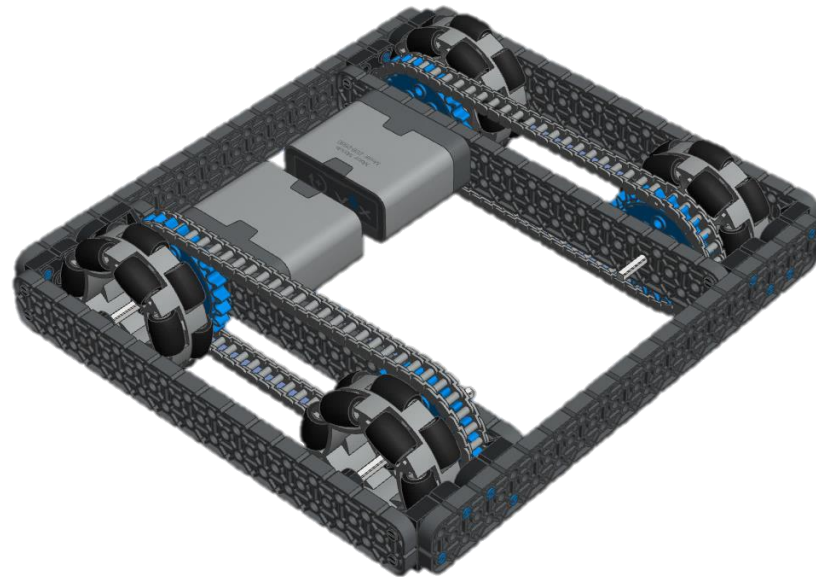
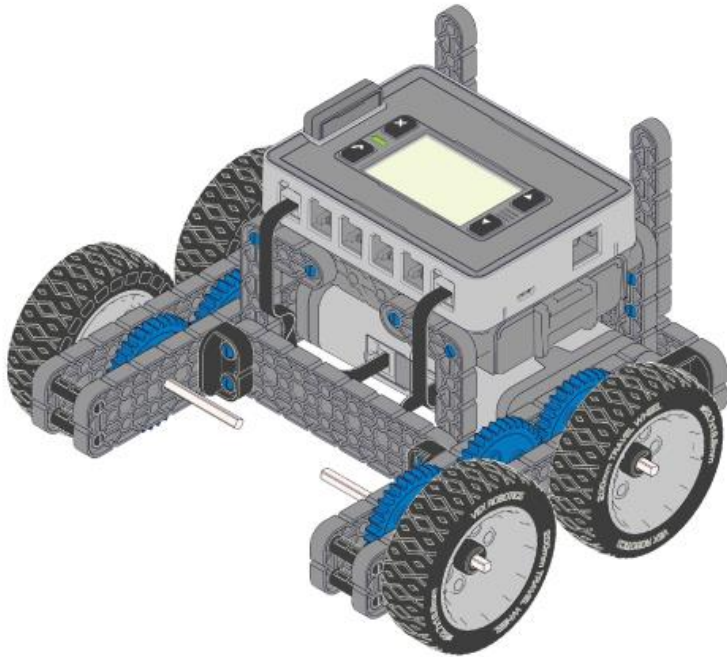
Breaking it down...



Breaking it down... (if you fall on your face)



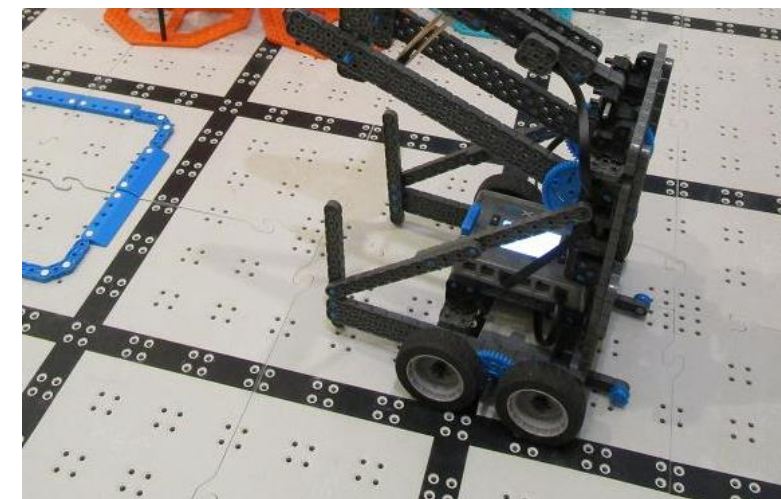
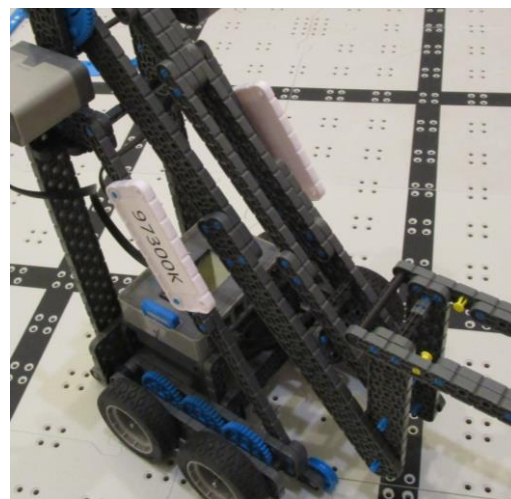
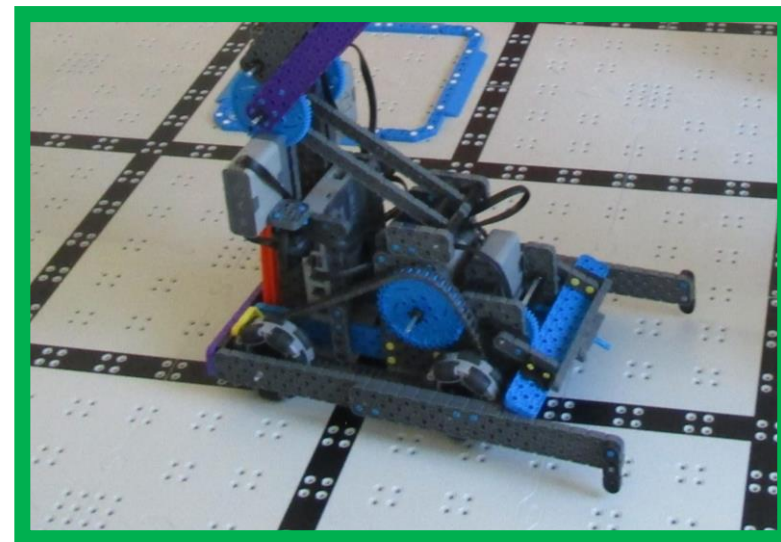
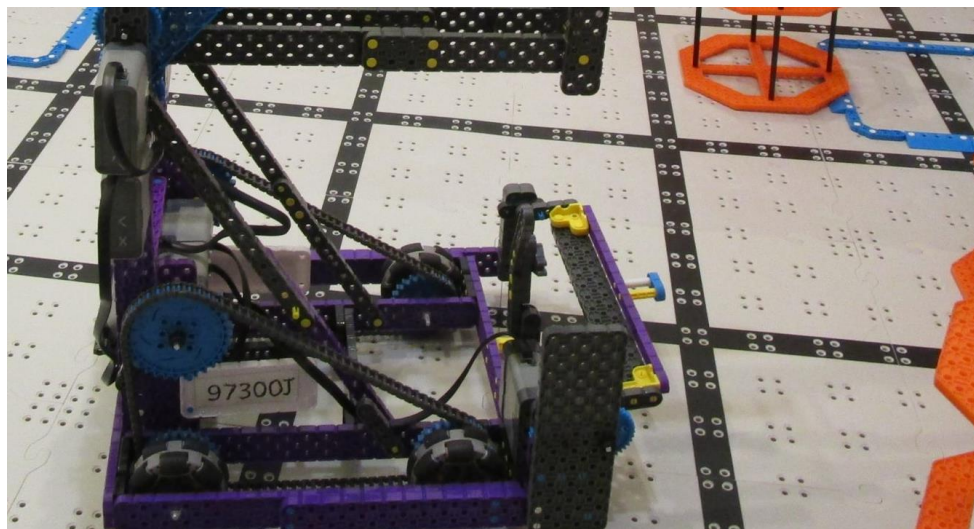
Last Time – Drive Bases



Last Time - Arms

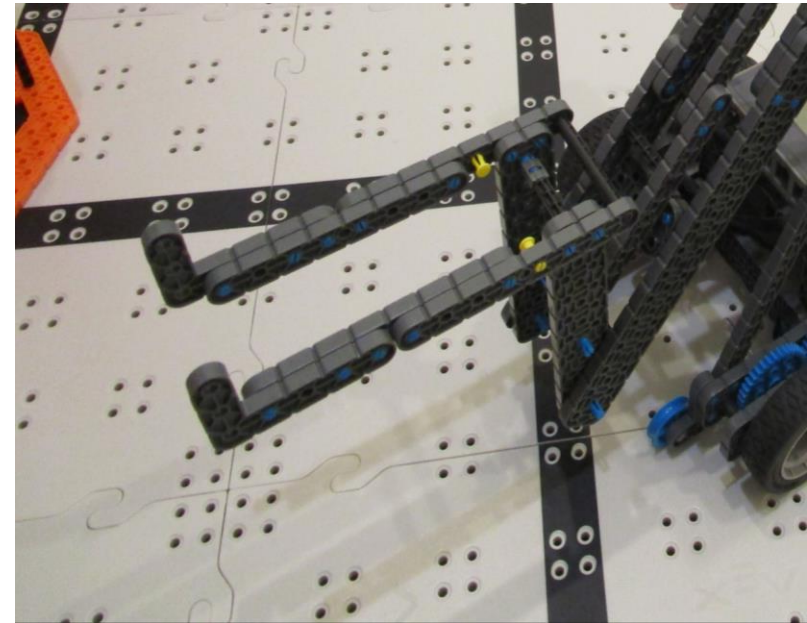
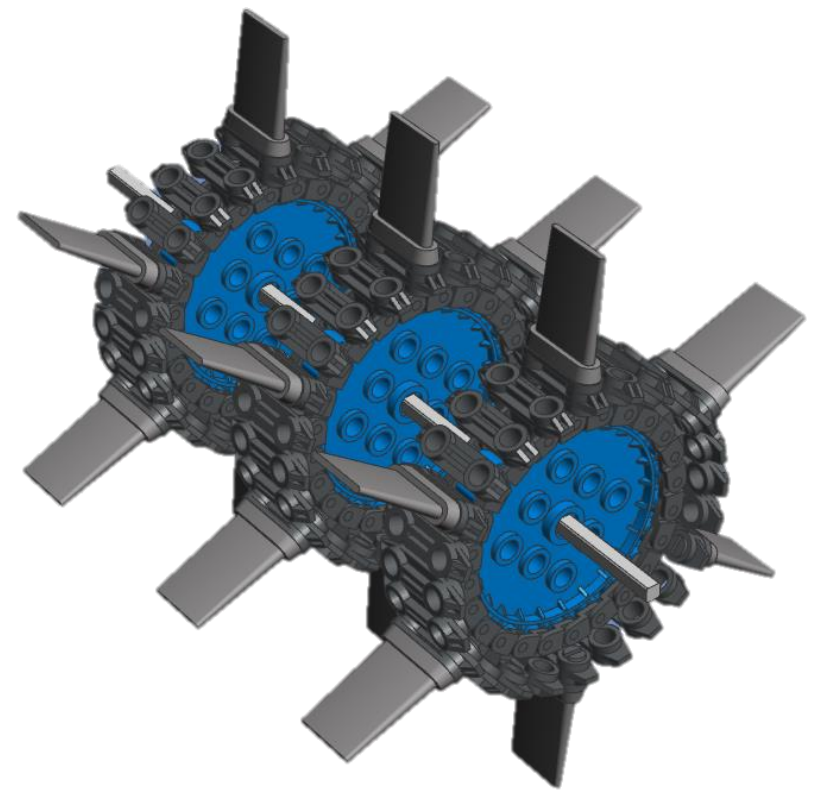
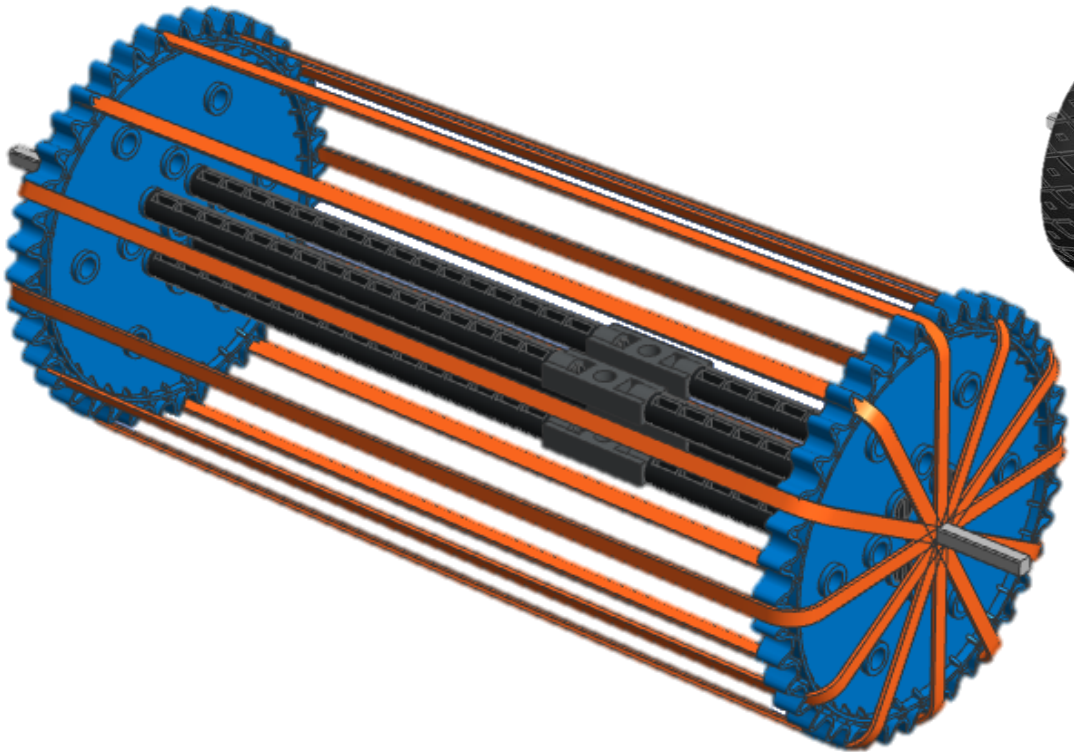


A-frames: Very useful, don't need to be large



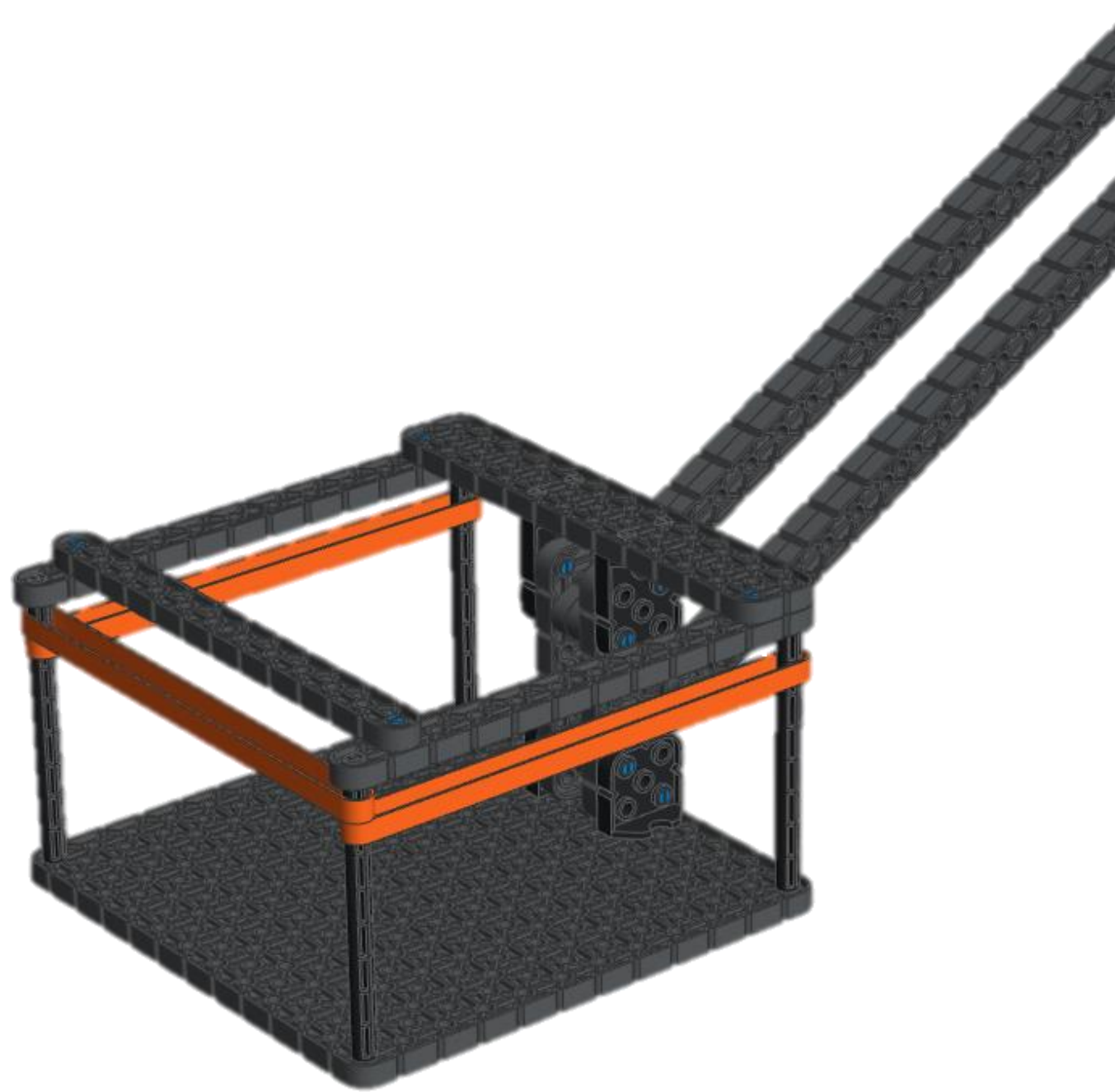
Rolly-Grabbers

- Great for balls, small objects
- Not so great for large objects – use a claw

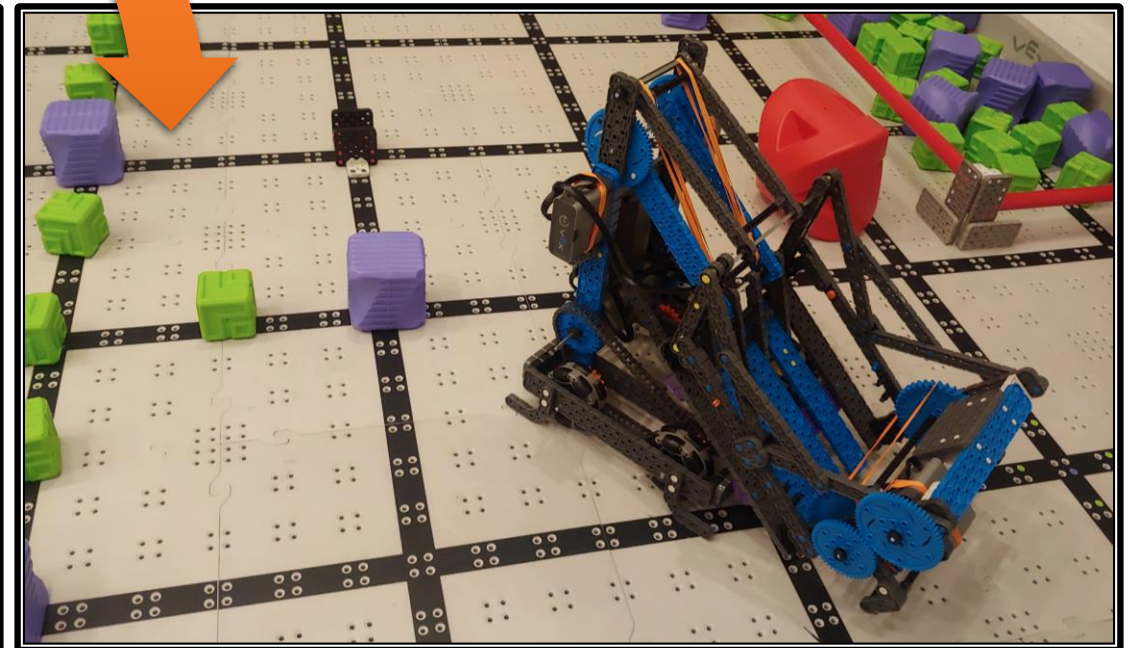
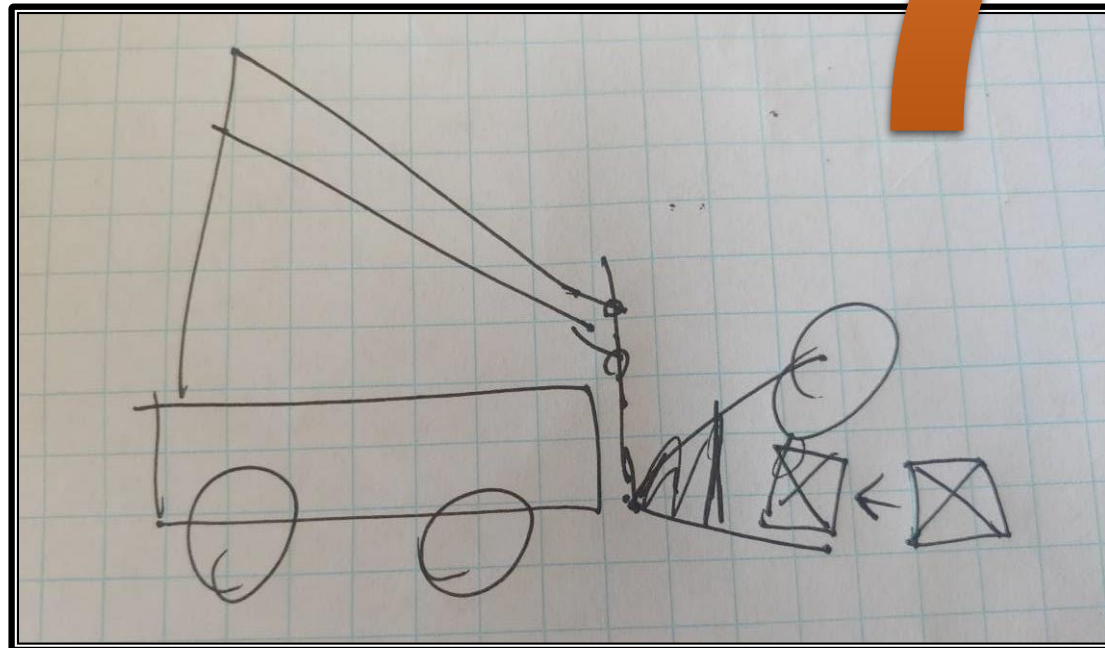


Passive Intakes

- Simple, light, large
- Require a wall or ramp
- Pretty uncommon



Putting the subsystems together - Example



SECRETS OF THE

VEX IQ[®]
ROBOTICS

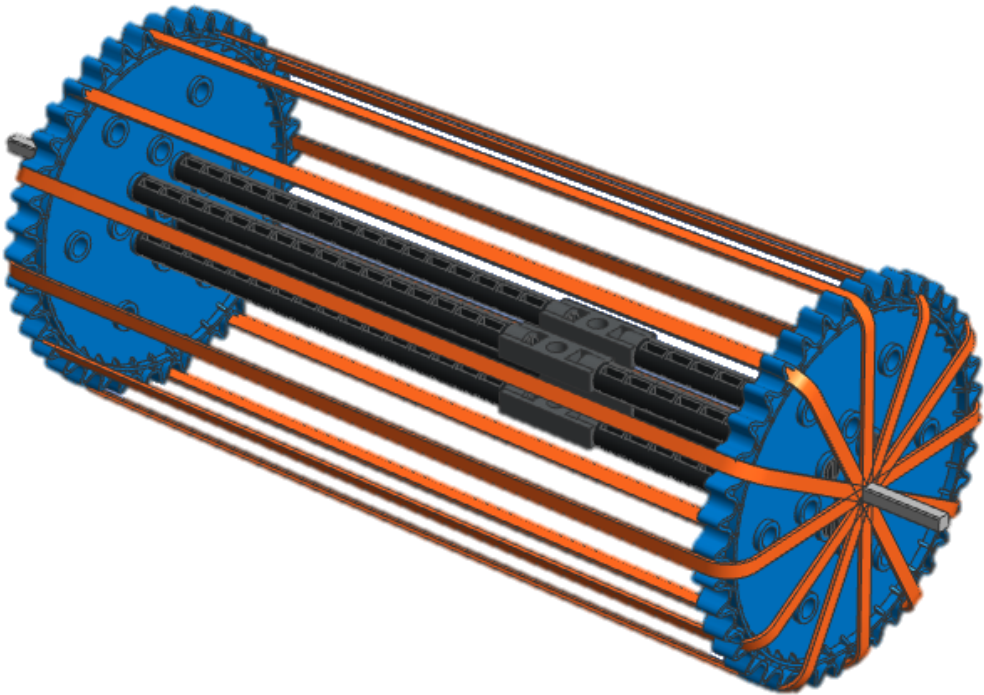
MASTERS

The background of the image is a dense, tangled mass of numerous light brown or tan rubber bands. The bands are piled together, creating a complex, overlapping pattern of loops and curves. The lighting is soft and even, highlighting the texture of the rubber material. In the center of this background, the text "The power of RUBBER BANDS" is displayed in a clean, black, sans-serif font. The word "The" is in a smaller size than "power", and "RUBBER BANDS" is in all caps and a larger size than "power".

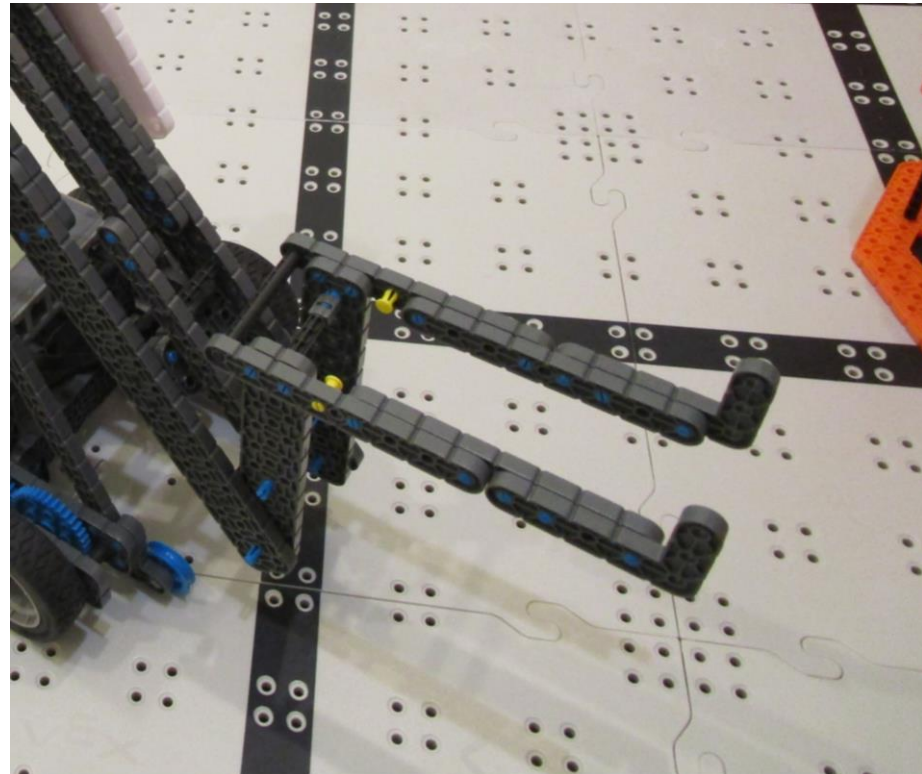
The power of
RUBBER BANDS

These 2 things will pick up almost anything...

Rubber band roller



Fork claw





FAILURE

I'M NOT THAT SMART,
I JUST FAIL IN PRIVATE
SO YOU WILL THINK I AM

PERCEPTION



REALITY

THANK YOU TO

VEX IQ[®]
ROBOTICS

MASTERS