

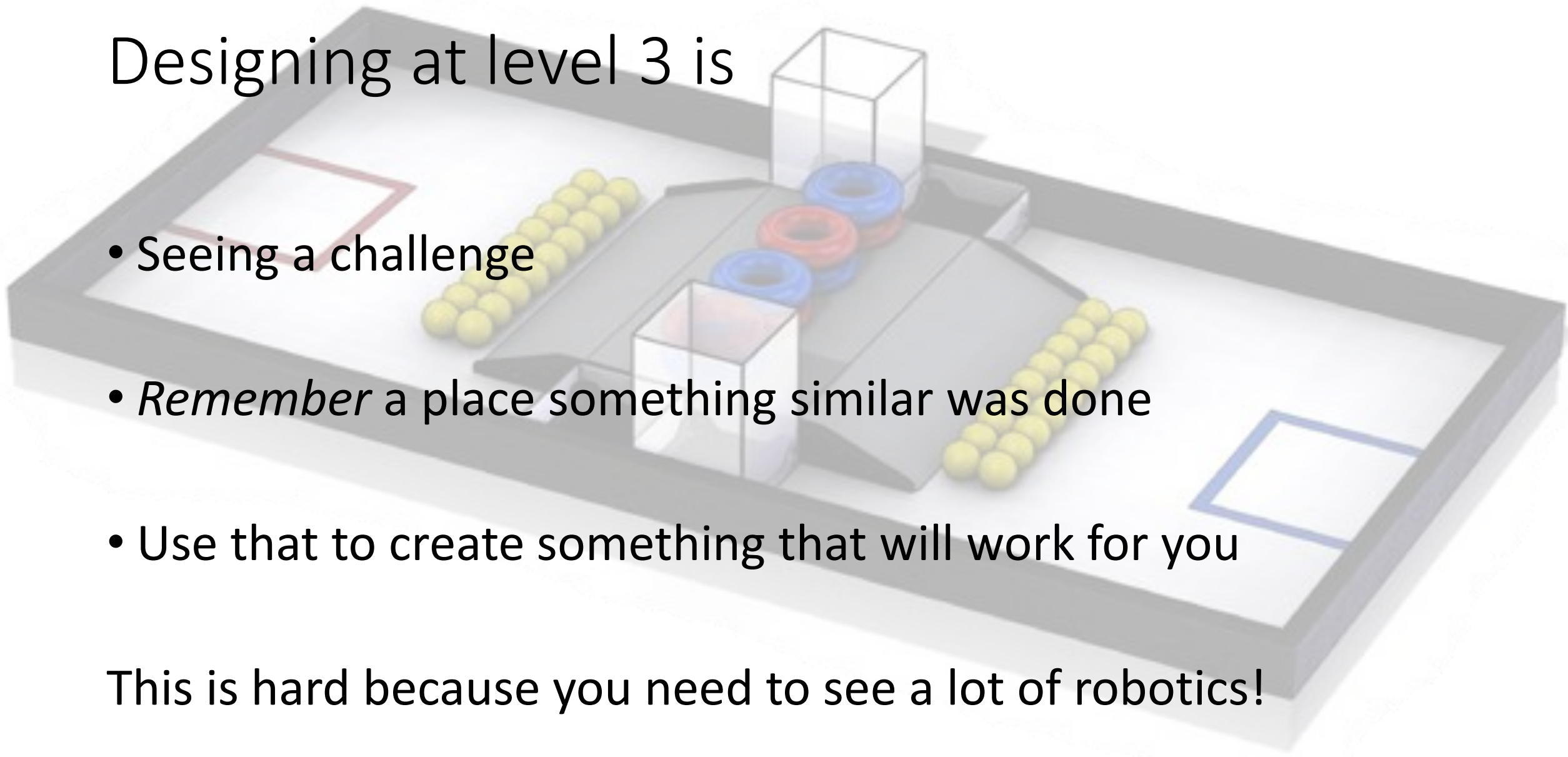
Being the best...

Comes from seeing patterns

# Designing at level 3 is

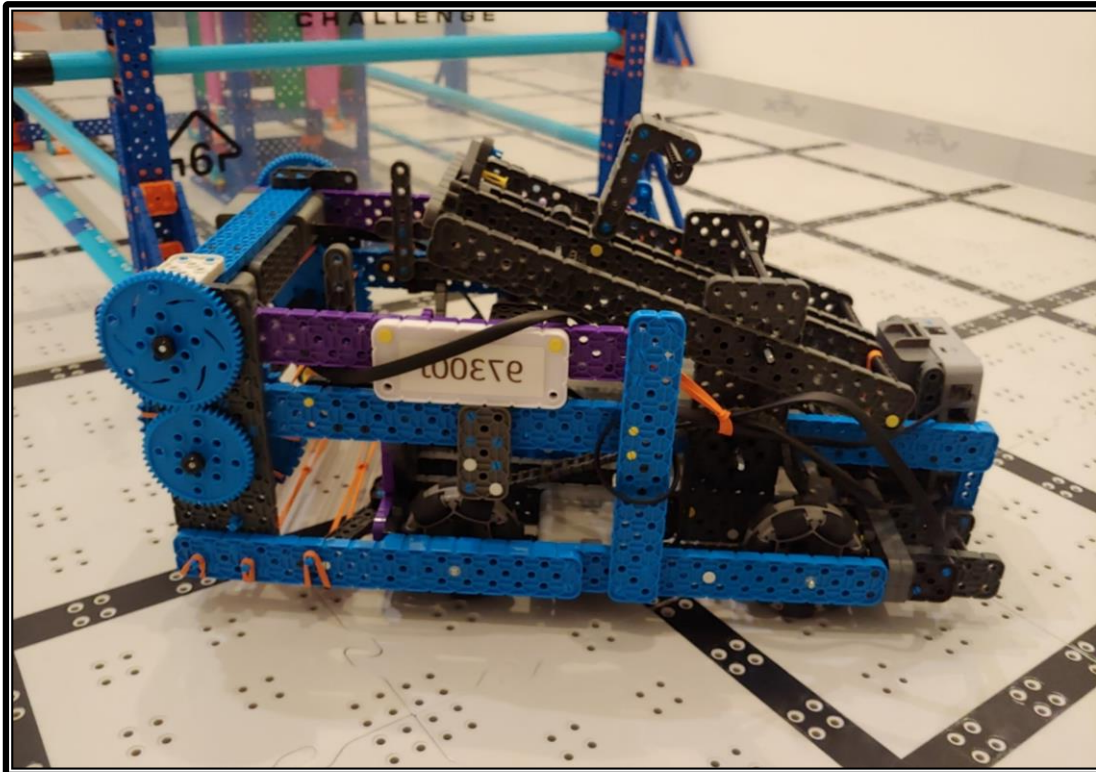
- Seeing a challenge
- *Remember* a place something similar was done
- Use that to create something that will work for you

This is hard because you need to see a lot of robotics!

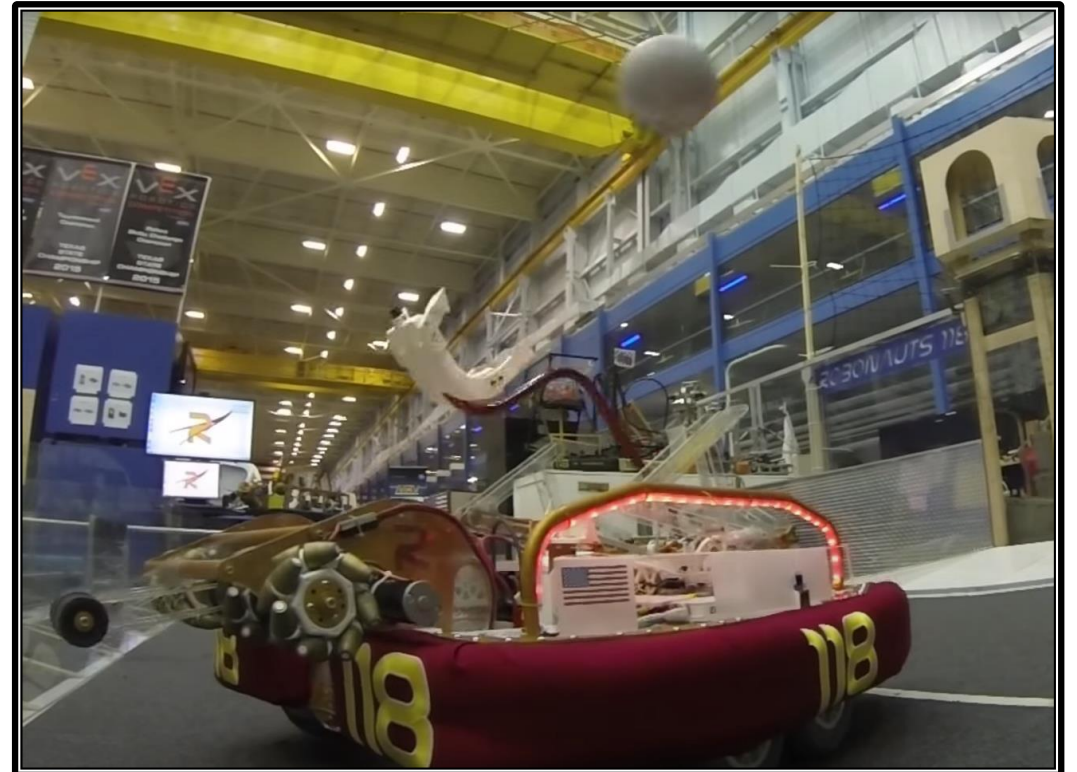


# Some examples...

**Shooters in pitching in**



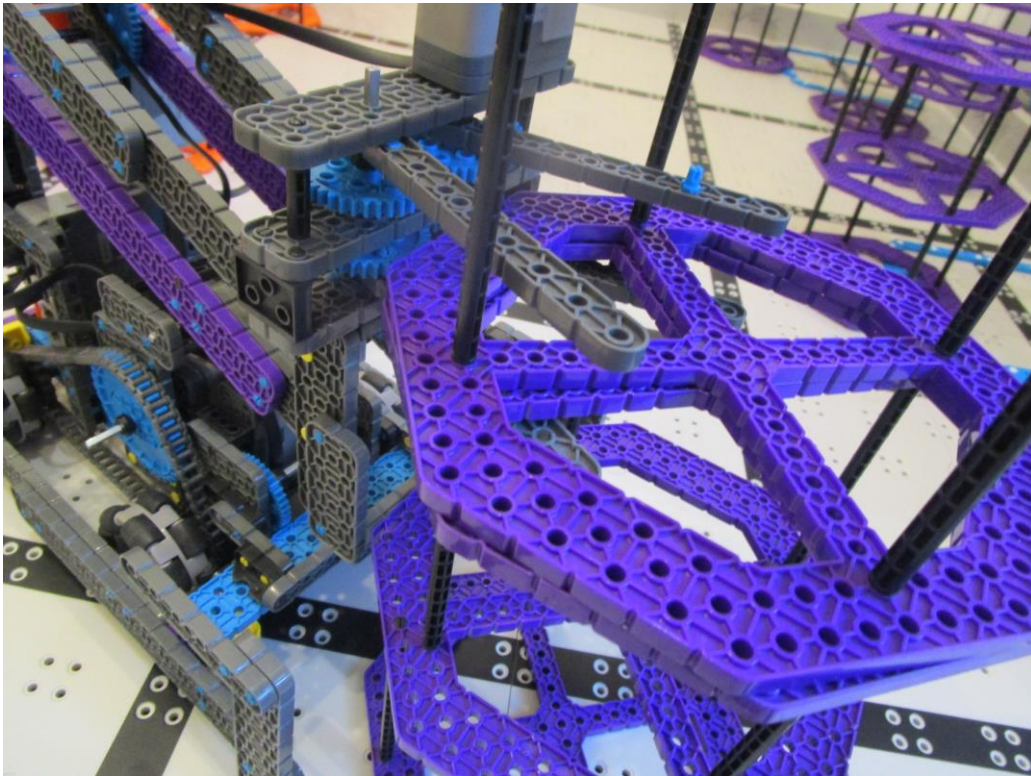
**From shooters in FRC**





# Some examples...

**“Razorbill” Claw**

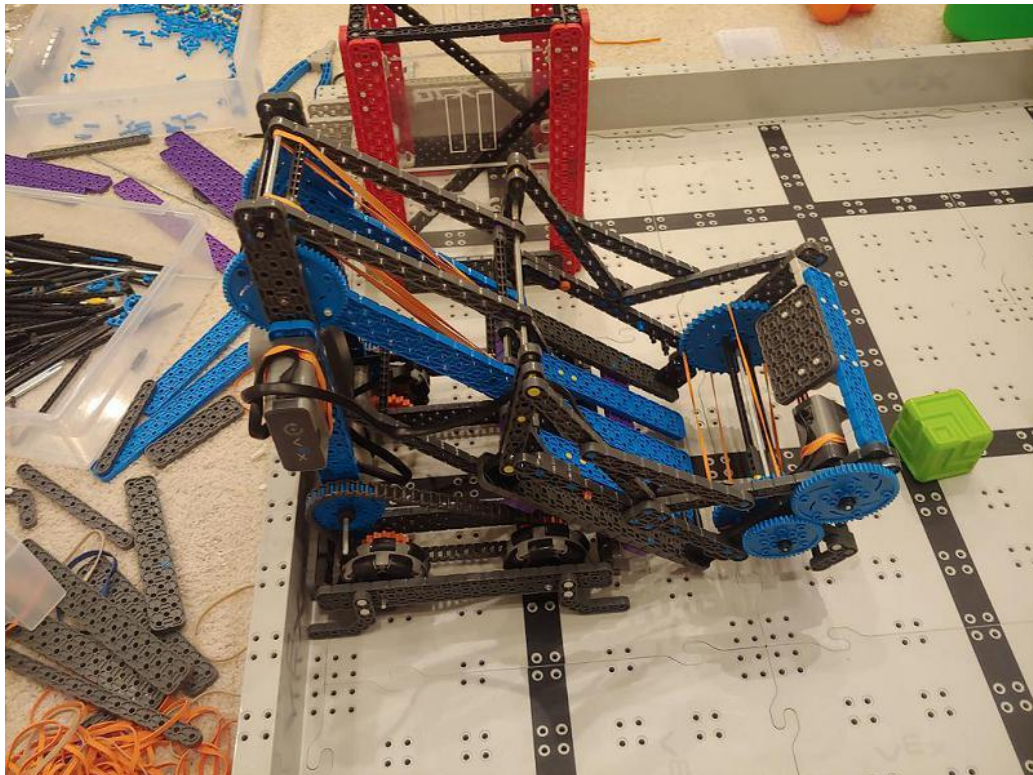


**From Camelots!**

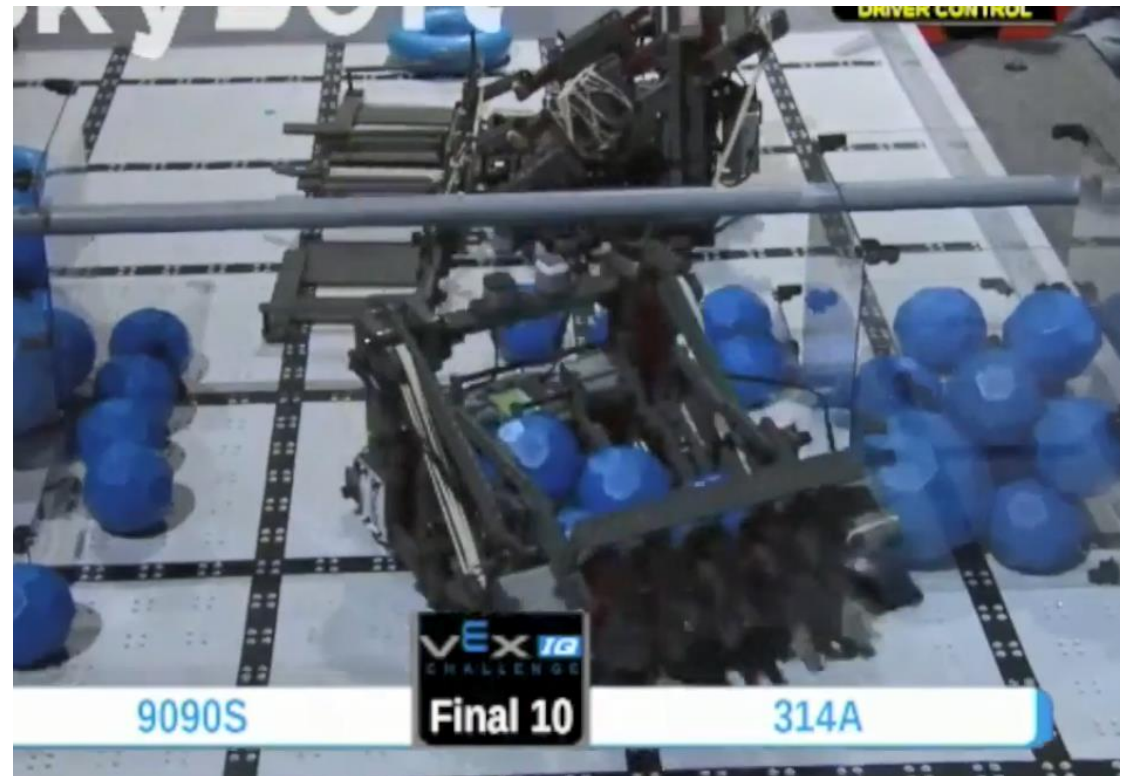


# Some examples...

**Blockbuster**



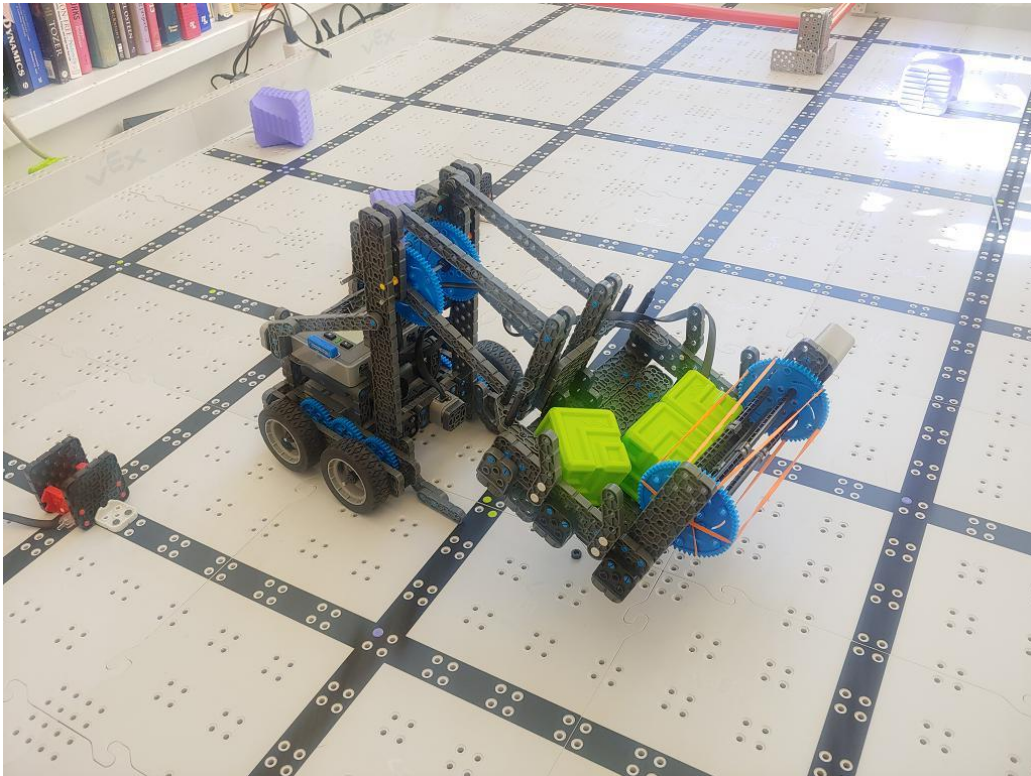
**From Add It Up!**





# Some examples...

**To Super-Linq!**



**Basic "Linq" from Crossover**





# VEX IQ HISTORY

Going back to the beginning of time...



# VEX IQ Rings & Things

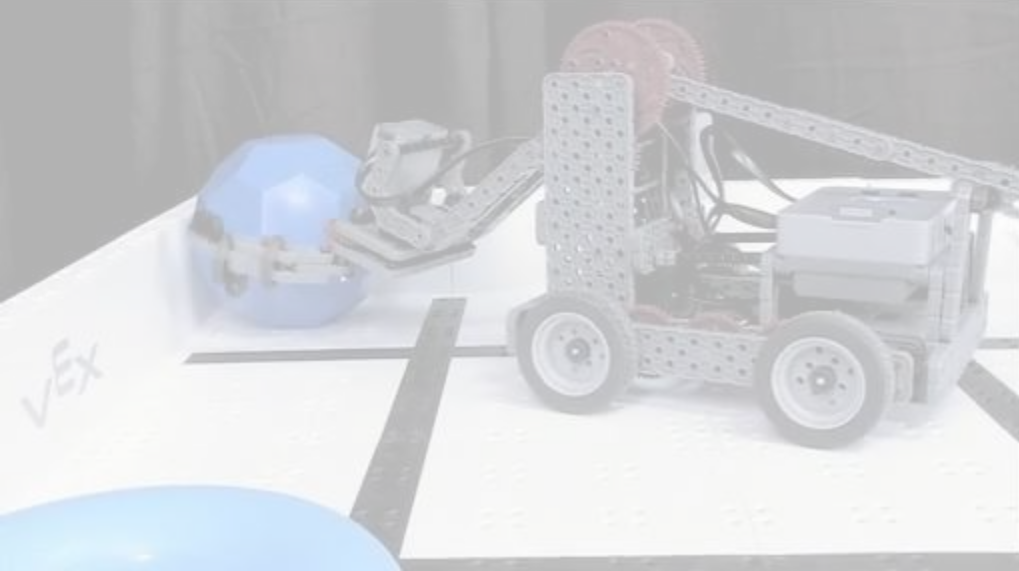
No useful information





# VEX IQ Add It Up

Old, but still some good stuff

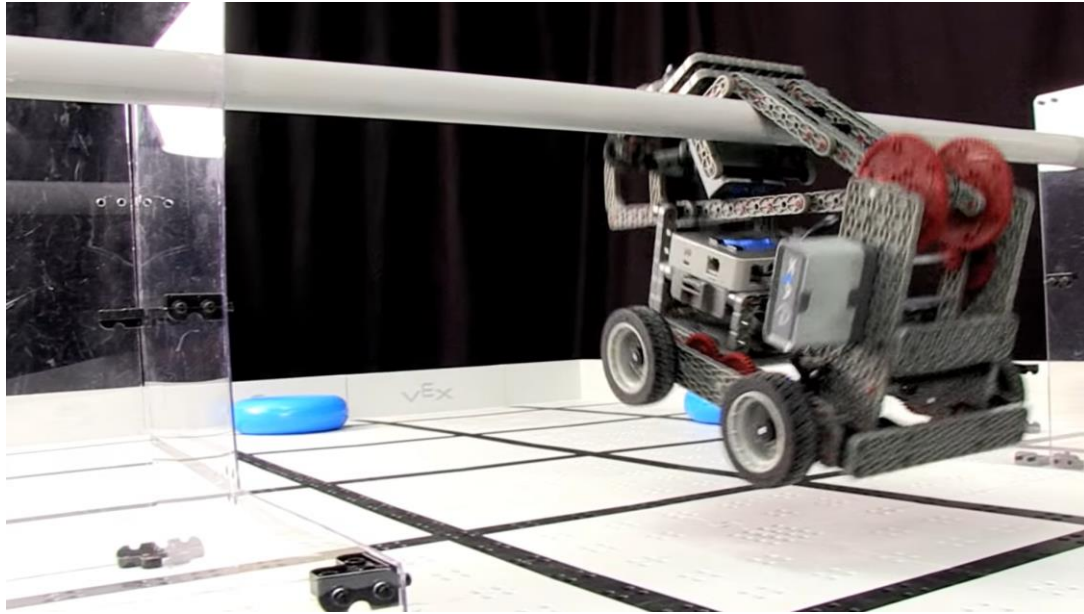


Total Score

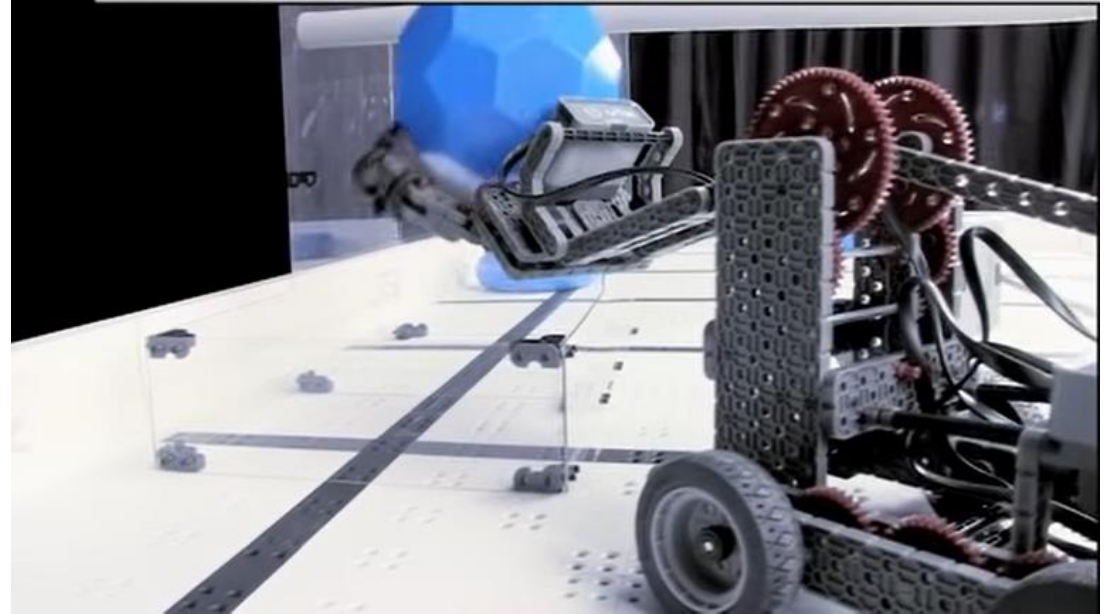
22

# VEX IQ Add It Up

**Hanging**



**Scoring lots of game pieces in a tall goal**





# VEX IQ Highrise

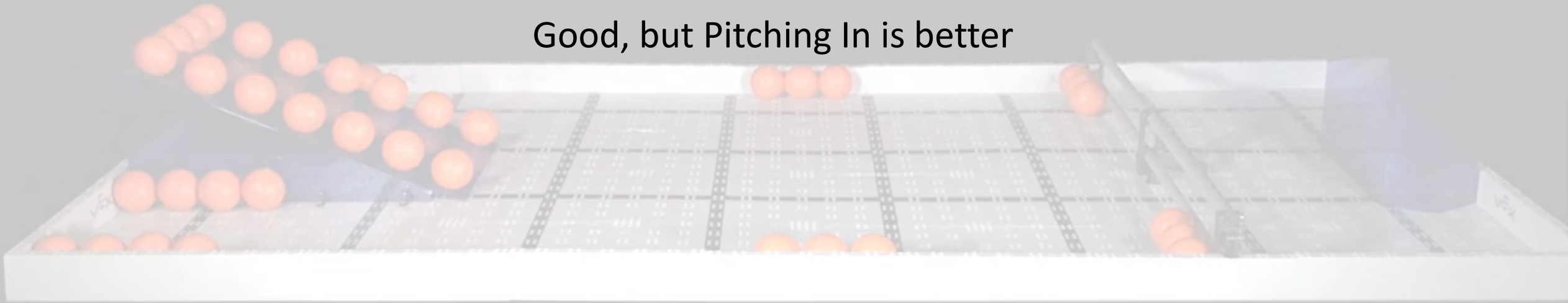
It's all stacking blocks



# VEX IQ CHALLENGE

## VEX IQ Bank Shot

Good, but Pitching In is better



Pitching In is the same game, better robots



A VEX IQ Challenge arena with a grid floor. A blue robot is positioned in the center. To its left, a vertical stack of orange spheres is suspended by a thin wire. To its right, a vertical stack of blue spheres is suspended. In the background, a grey structure with orange platforms holds more blue spheres. The text 'VEX IQ CHALLENGE' is visible on the robot's field.

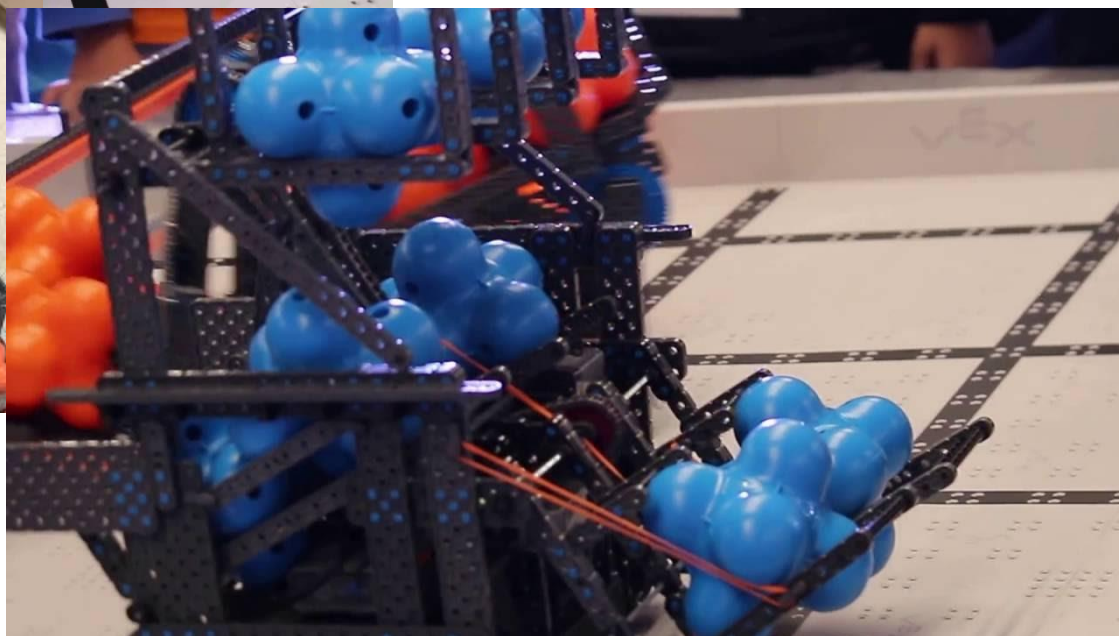
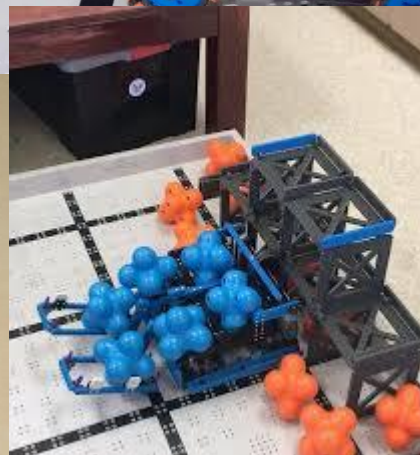
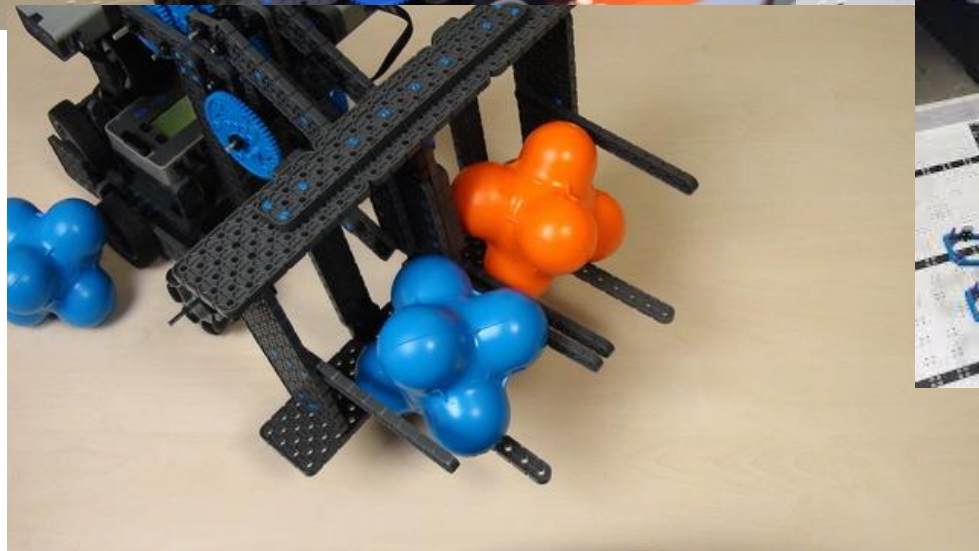
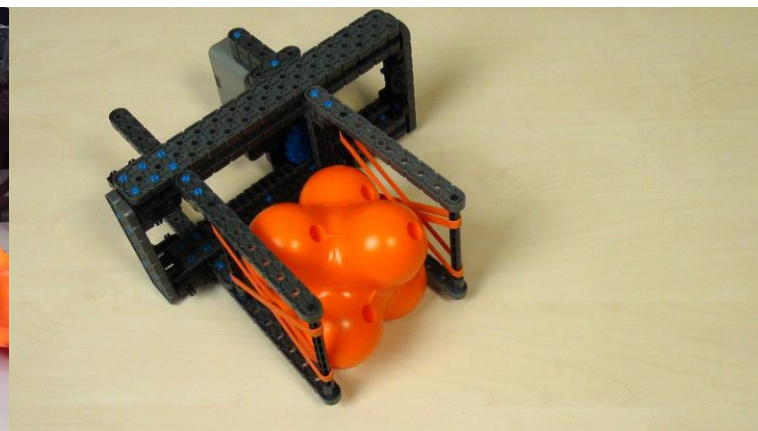
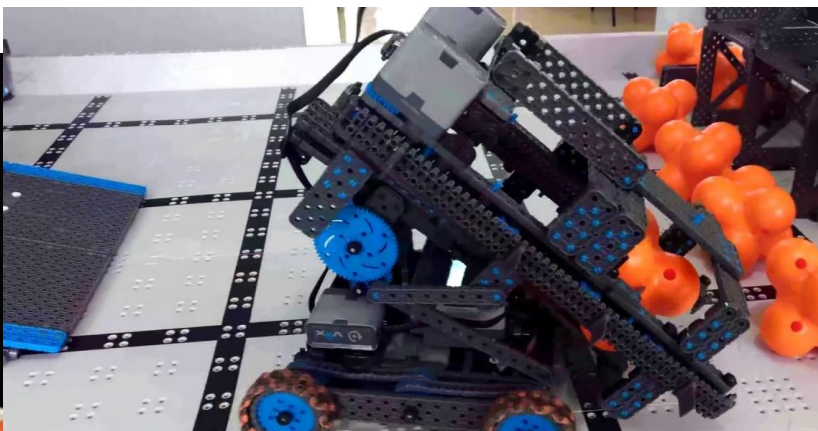
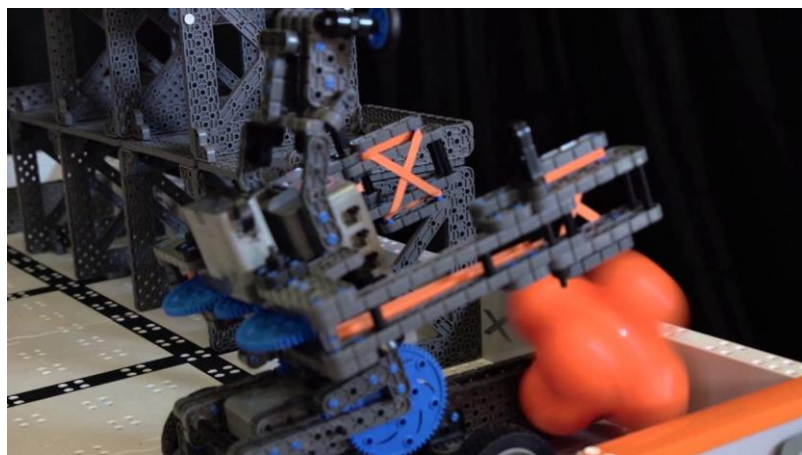
# VEX IQ Crossover

Picking up non-spheres!

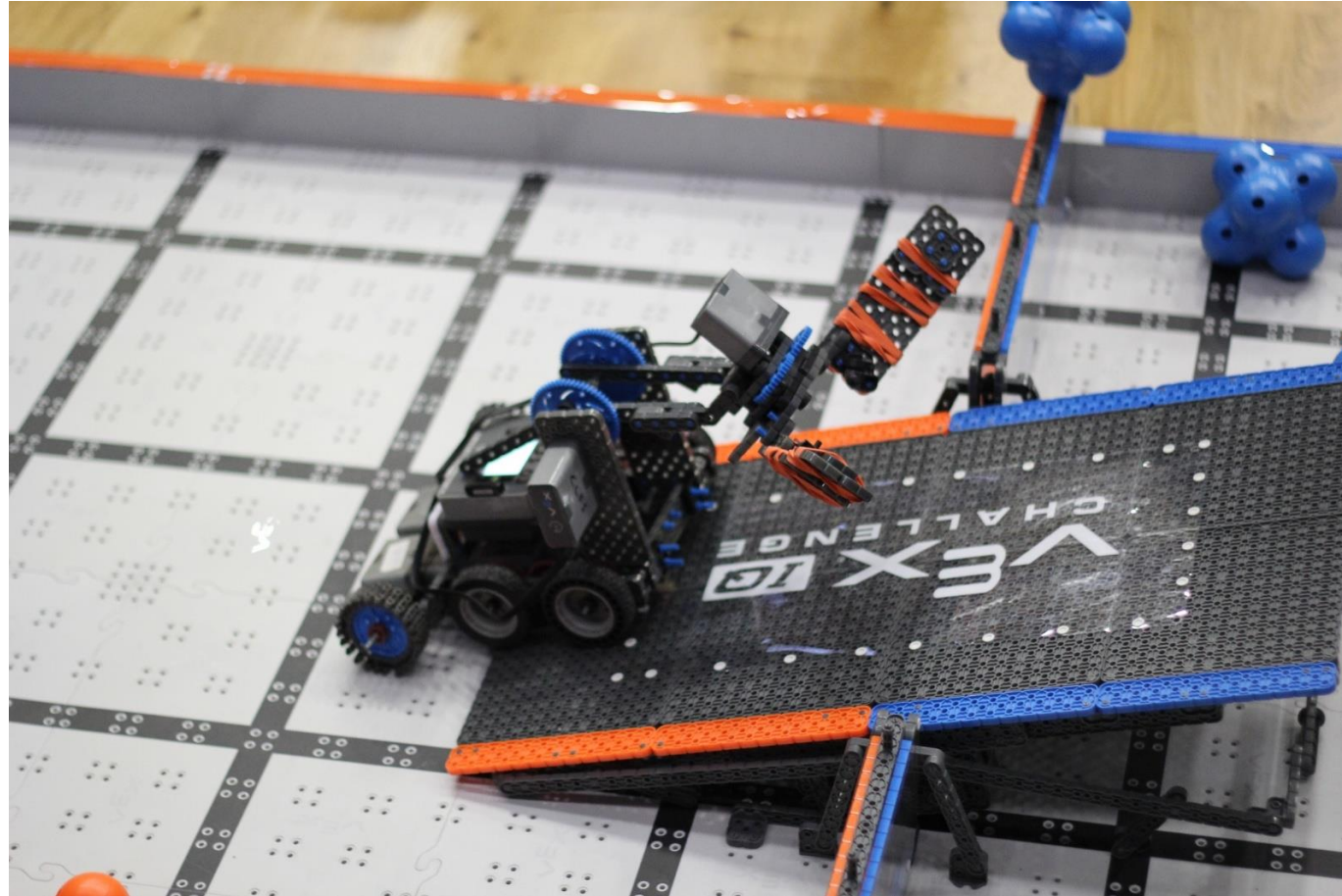
And balancing



# Picking up non-spheres



Balancing is coming back! (I think)





A VEX IQ robot is shown with a custom-built mechanism for handling rings. The robot is grey and has a yellow sensor on the left. The ringmaster mechanism consists of a series of colored rings (red, green, blue) that are being moved by a motor. The robot is on a white surface. The background is a plain, light-colored wall.

# VEX IQ Ringmaster

Anything with rings again, look here!

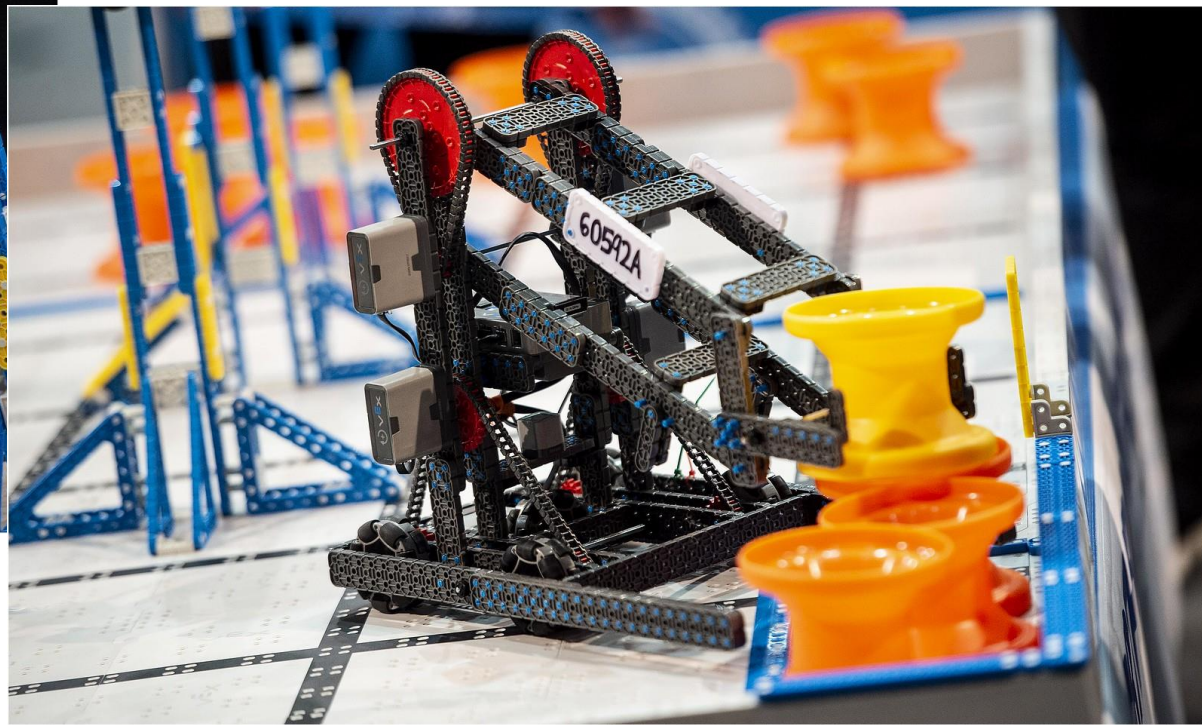
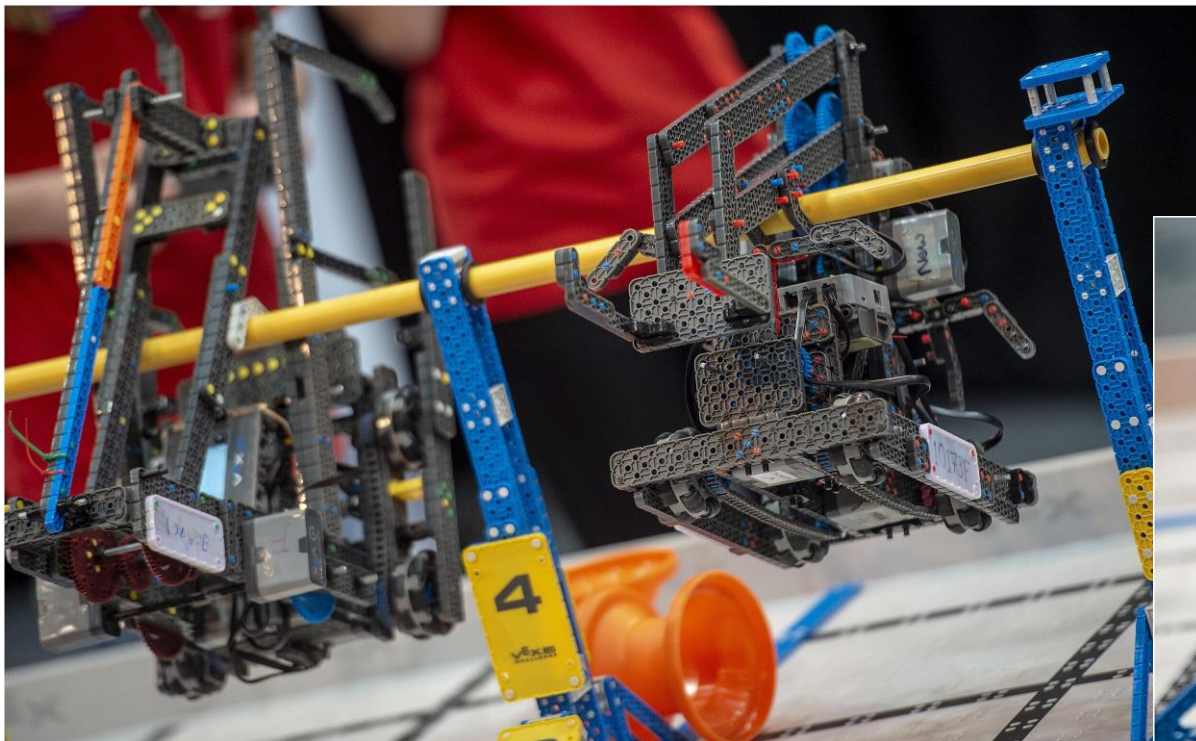




# VEX IQ Next Level

Climbing & Arms

# Arms and climbing!





**VEX IQ**  
**CHALLENGE**  
**SQUARED AWAY**

# VEX IQ Squared Away

Weird game – lots of cool stuff though





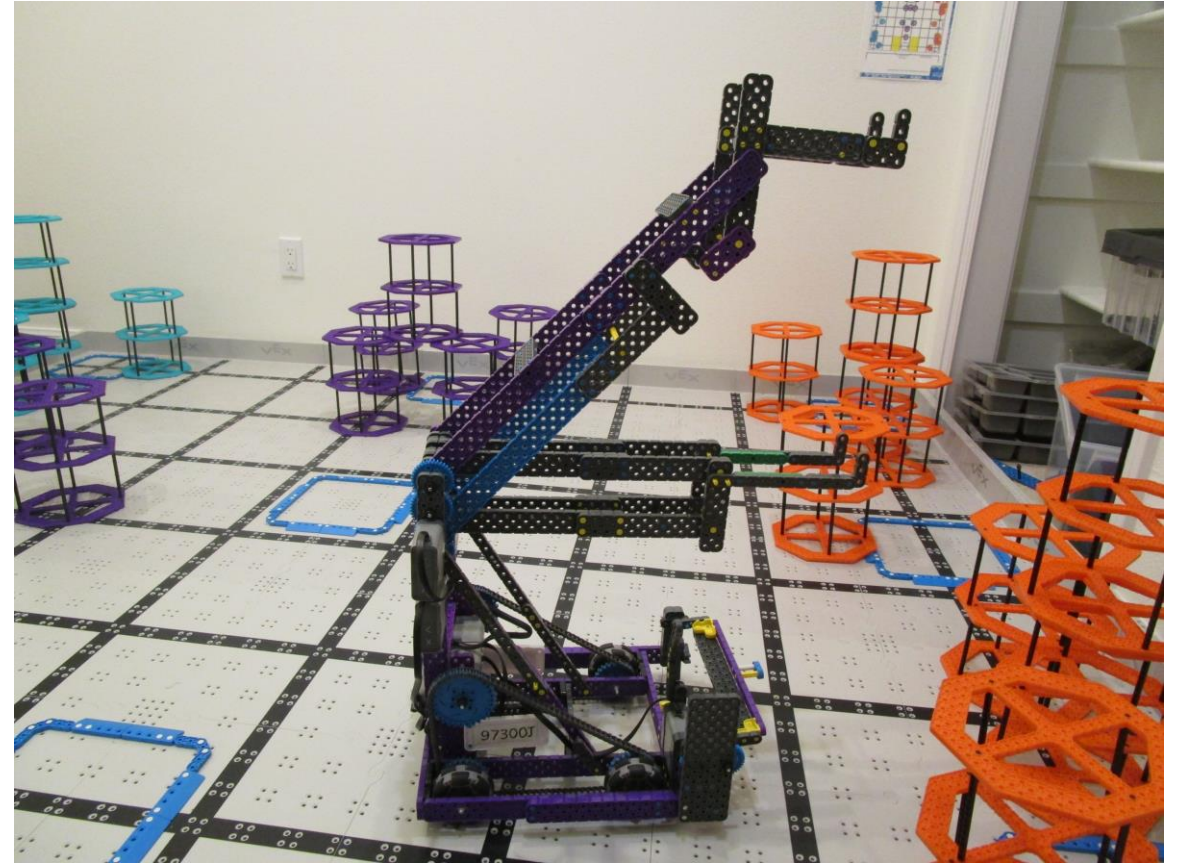
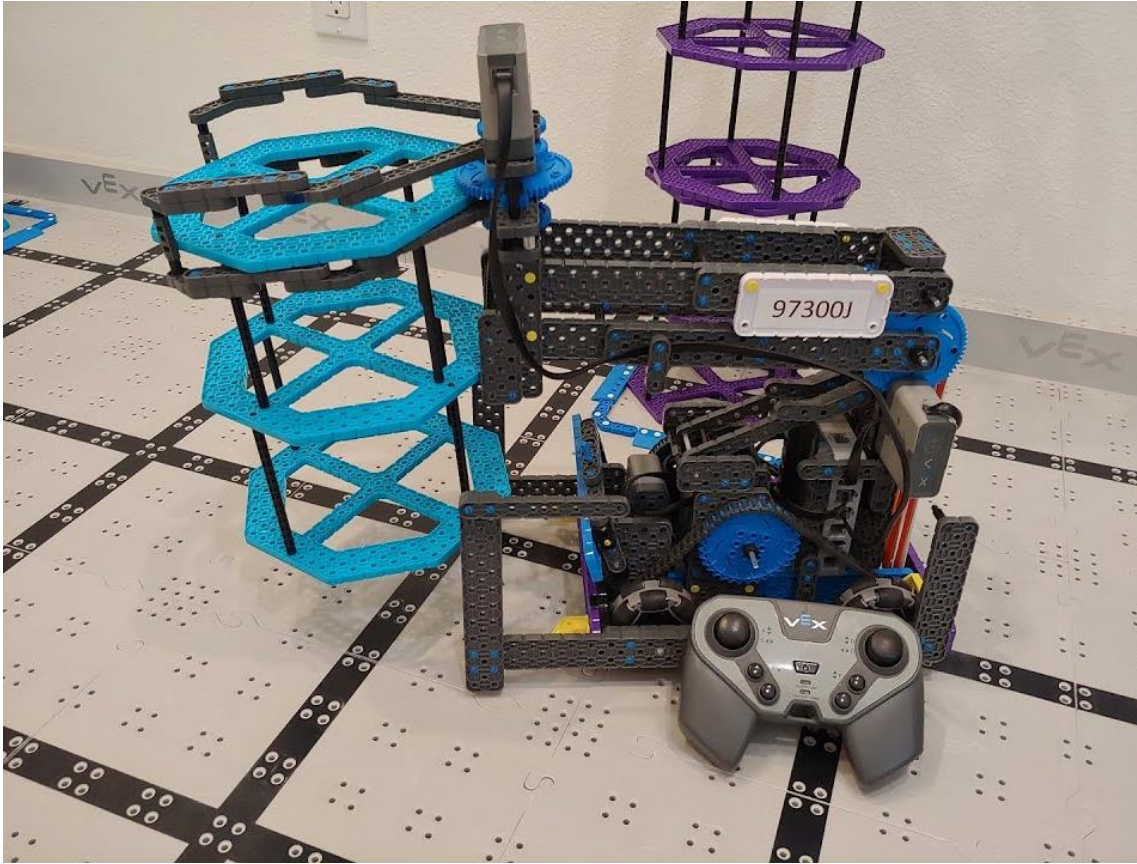
+1

# VEX IQ Rise Above

Arms & stacking!



# Great arms and stacking!





# VEX IQ CHALLENGE

## VEX IQ Pitching In

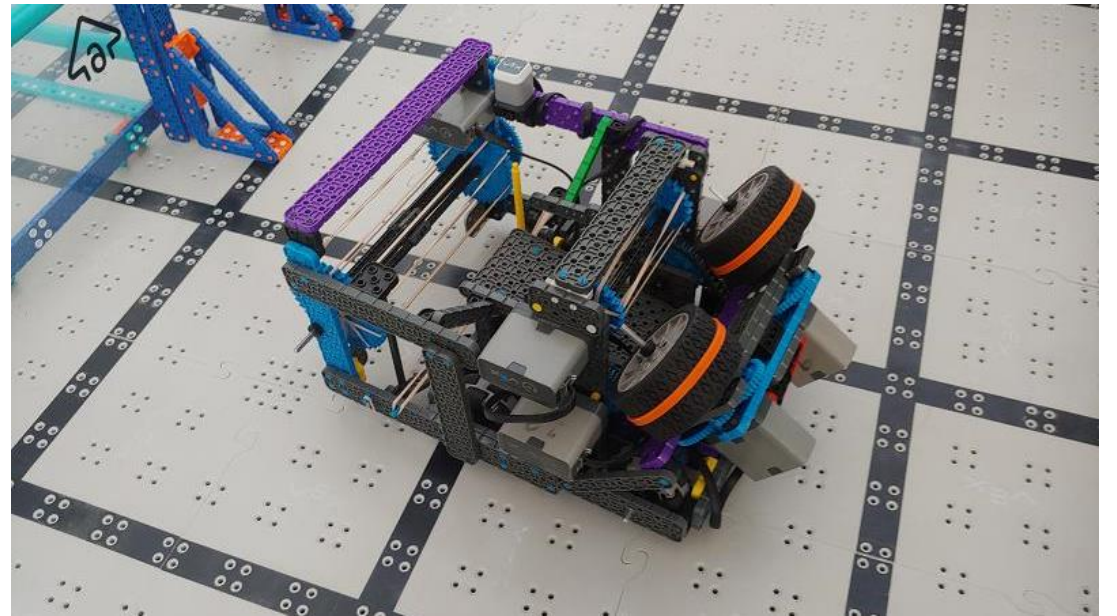
Shooting all the way!

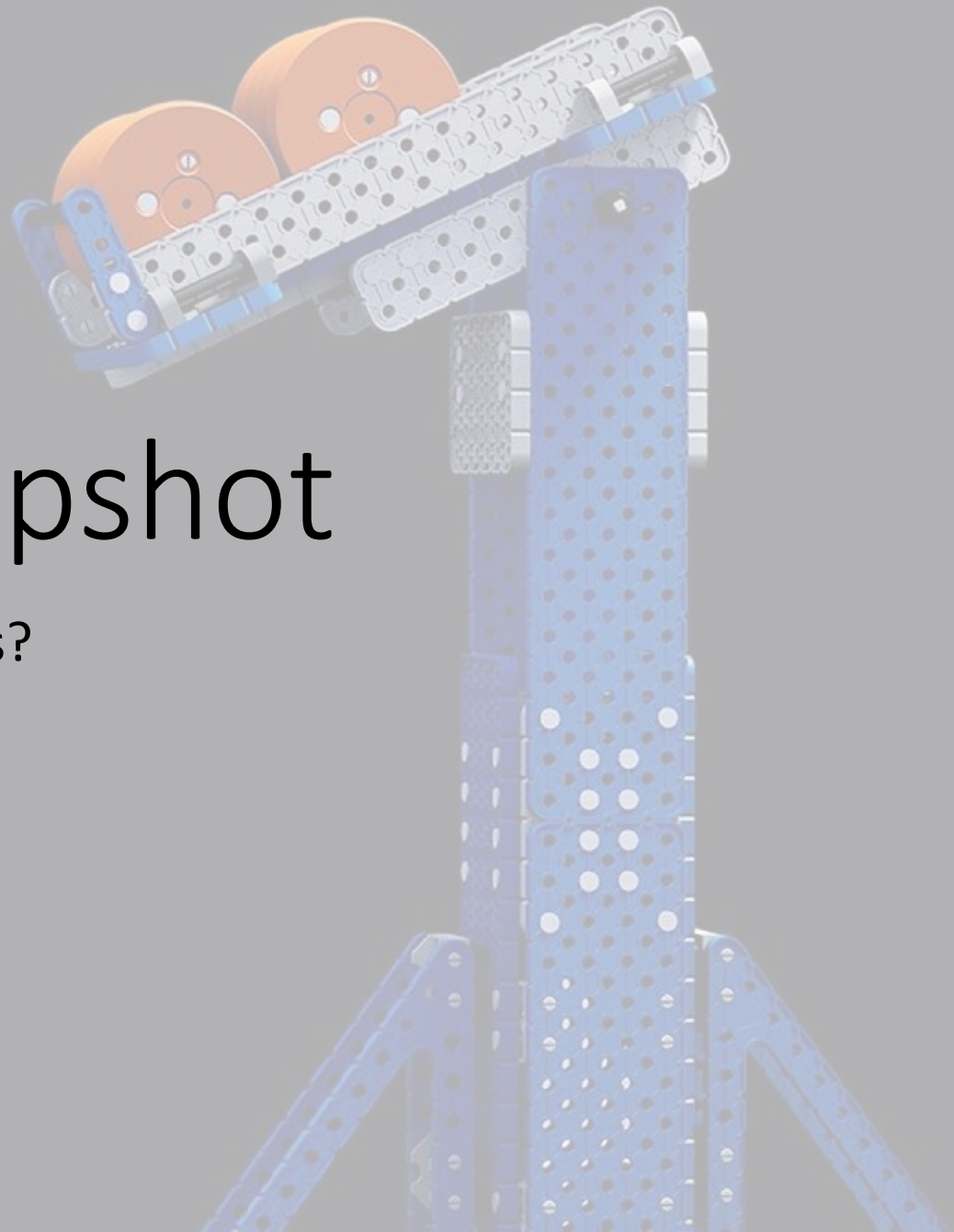
PITCHING IN





# Catapults and Flywheels





VEX IQ  
COMPETITION

# VEX IQ Slapshot

Pucks? Discs?

**SLAPSHOT**

Discs and pucks?



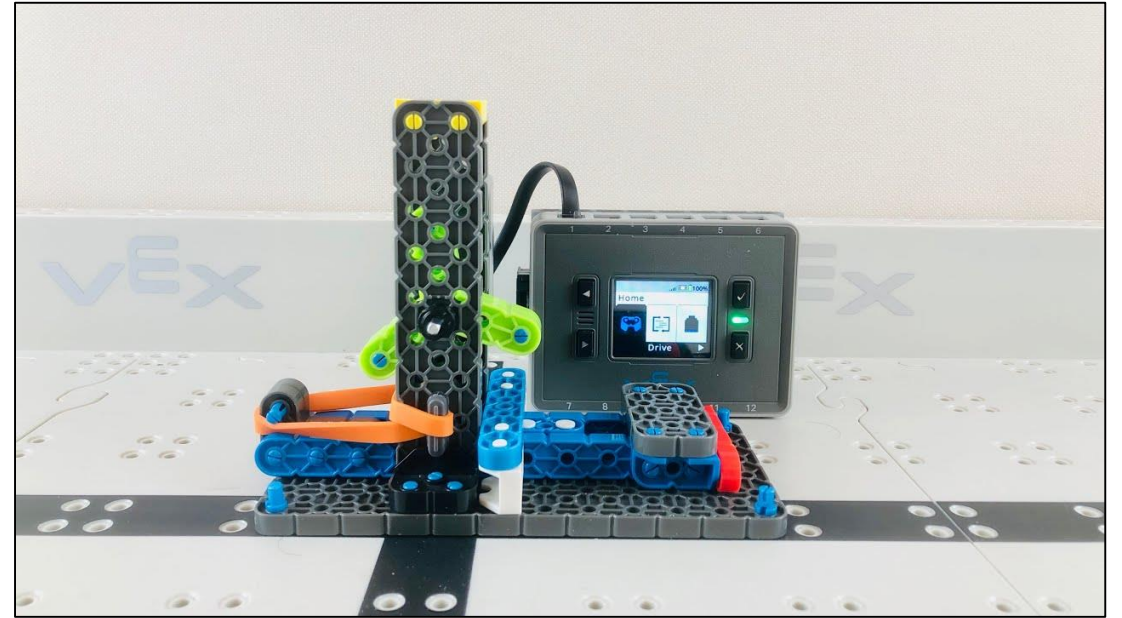


# Shooting a flat game piece with...

**A wheel**



**A puncher**



VEX IQ  
ROBOTICS  
COMPETITION

# VEX IQ Full<sup>®</sup> Volume

??????????????

Only time will tell...

**FULL VOLUME**

