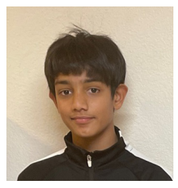
BOYz BOT

TEAM # 74756A


Vineeth


Krish

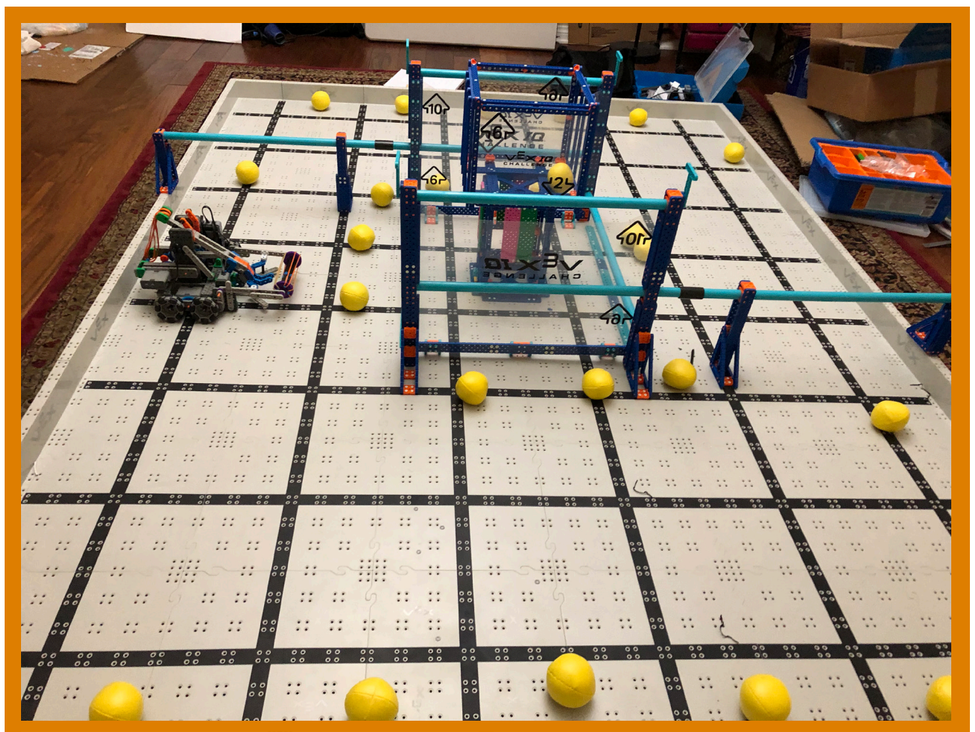

Suyash

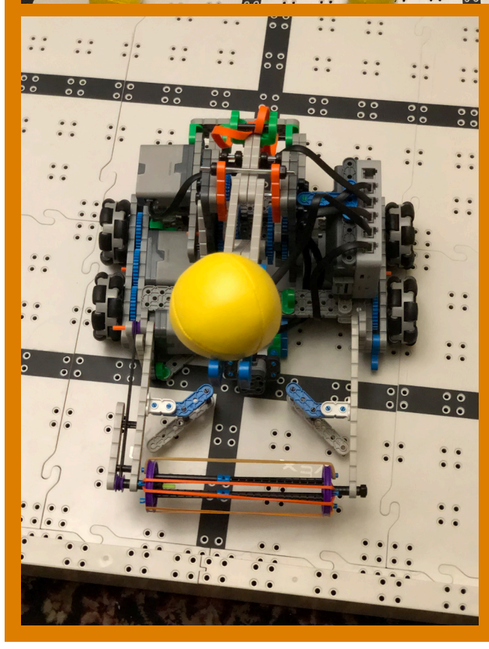

Arya


Vishaal


Anirudh

VEX IQ ROBOT





OMNI WHEEL

The omni wheel is vital to the overall efficiency of the robot. An omni wheel allows for miltidirectional movement without moving the device itself and just the weheels. This can result in a lot more efficient moving because the device, a robot in our case, will avoid the hassle of turning itself repeatedly.

CATAPULT

Catapults were used in acient times to fling stone balls to attack enemies in battles. This idea has be incorporated into our Vex IQ robot to fling the game balls into the high goal to gain points. This is a vital portion of gaining points. A simple machine like this has been used in our project, and with a few changes, this machine supplies a major force in winning the matches and competition.

CONVEYOR BELT

The conveyor belt that you see in the picture is an important asset to our robot design because it is a part that intakes the game balls, which allows the balls to be set onto the catapult. We use this intake motor as it would be really hard to scoop up the ball with the catapult arm itself. So this intake motor keeps the ball stable while pushing the ball on to the catapult arm.

STEM PROJECT

ATMOSPHERIC WATER GENERATOR

For the Stem Research Project, we chose to resolve the problem of over-watering. We built a capillary action device and an Atmospheric Water Generator (AWG). The capillary action cevice is used to collect the water and deposit it into the AWG's storage unit using its adhesive and cohesive forces. The AWG would then use this water to coll itself, and after the AWG's copper tubes are fully cooled and come in contact with the water vapor in the air, water droplets start forming aluminum pan. The distilled water collected in the pan is ready for consumption by humans. One important feature of this project is that no water is wasted in the process.

REVERSE ENGINEERING

GOOGLE NEST MINI BATTERY

For our reverse engineering project, we decided to work on a Google Nest Mini. We chose this item because our team noticed a disadvantage while using the amazing piece of technology. We saw taht device has to plugged into an outlet at all times. So, our team figured that making the google nest mini portable would be a great addition to the device. We did this by taking a few batteries and connectiing them to the device as a power source.