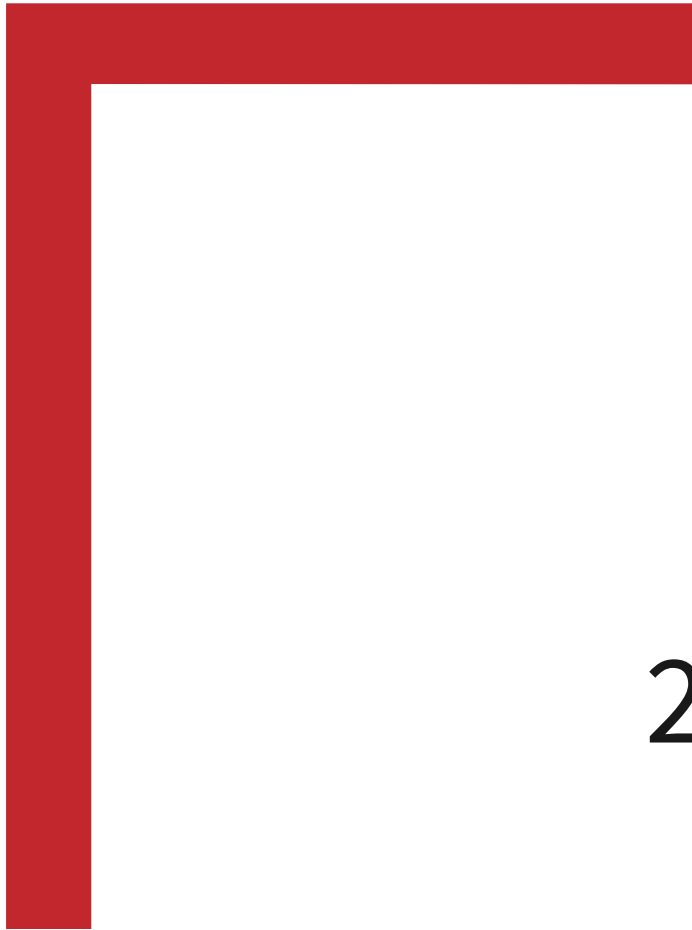
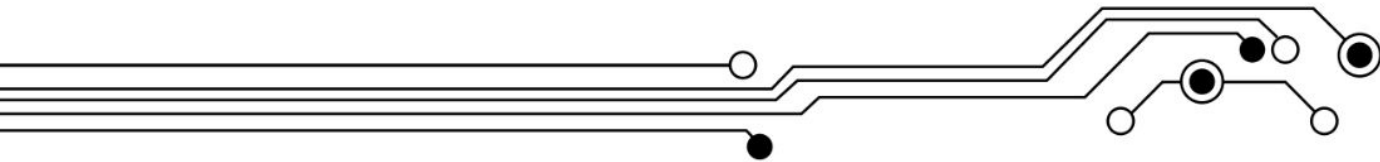
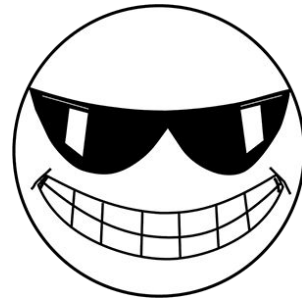
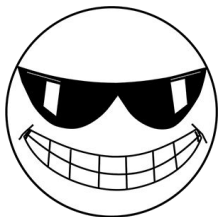
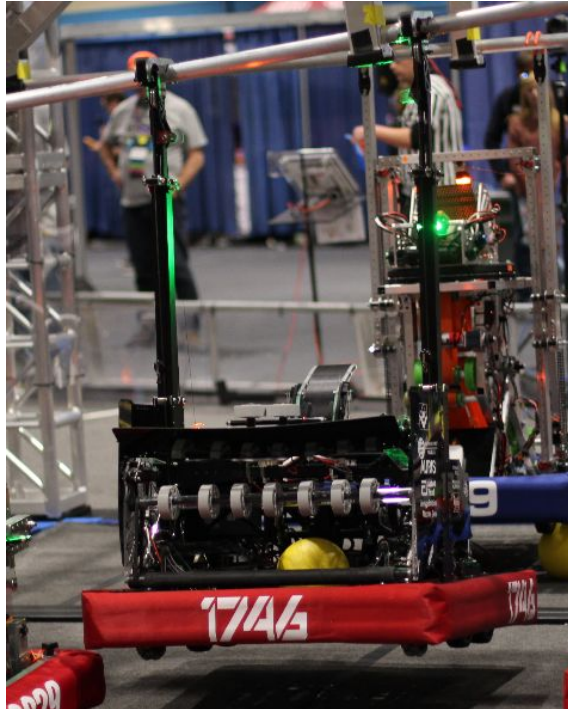
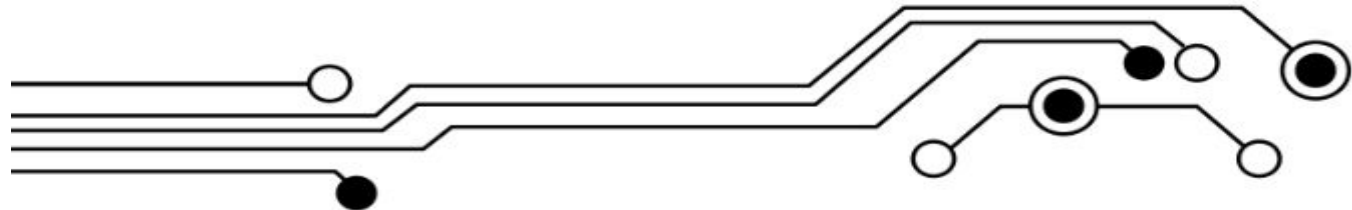


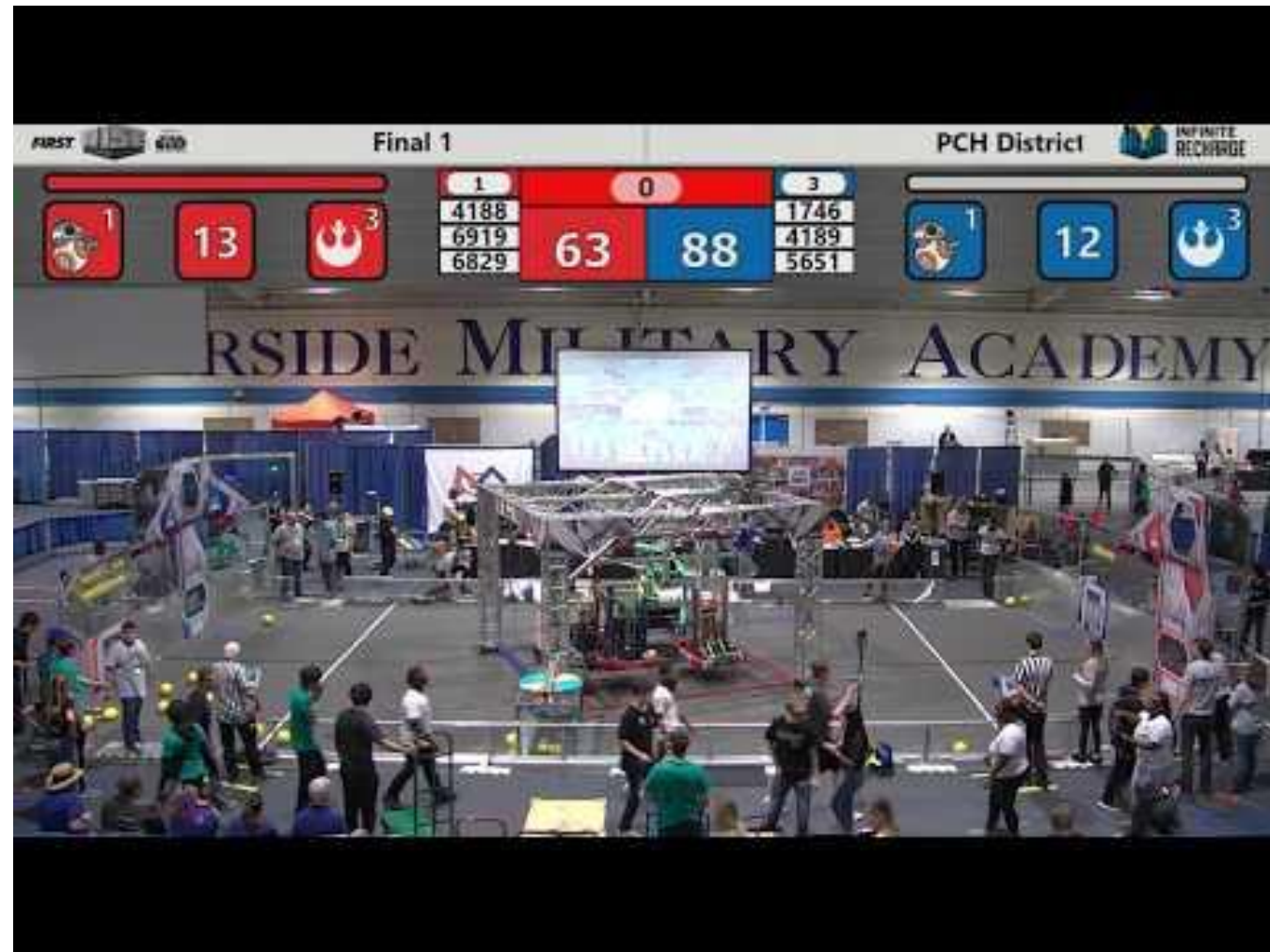
2020 First Meeting





- FRC Robotics Club
- Year round meetings
- Flexible with most schedules
- **Meets the STEM competition requirements**
- Amazing opportunity to get real world engineering experience, along with marketing and business relations.





OTTO 1746 - Gainesville 2020 Regional

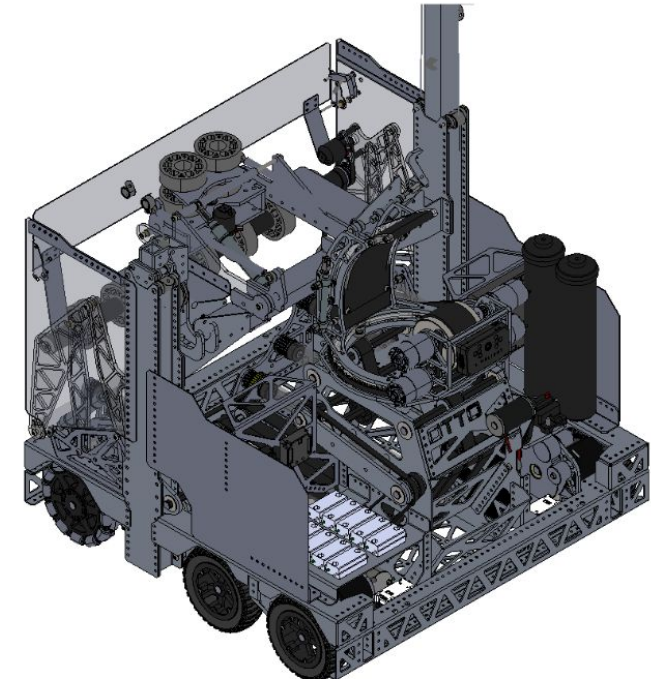
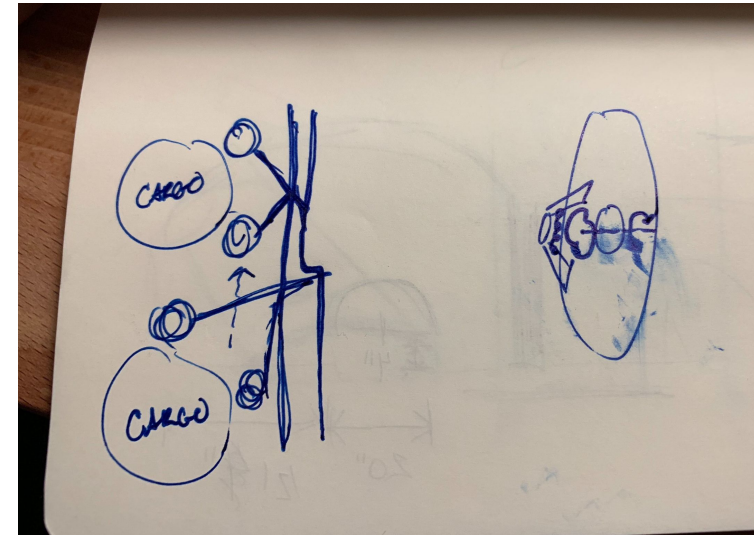


Team Structure



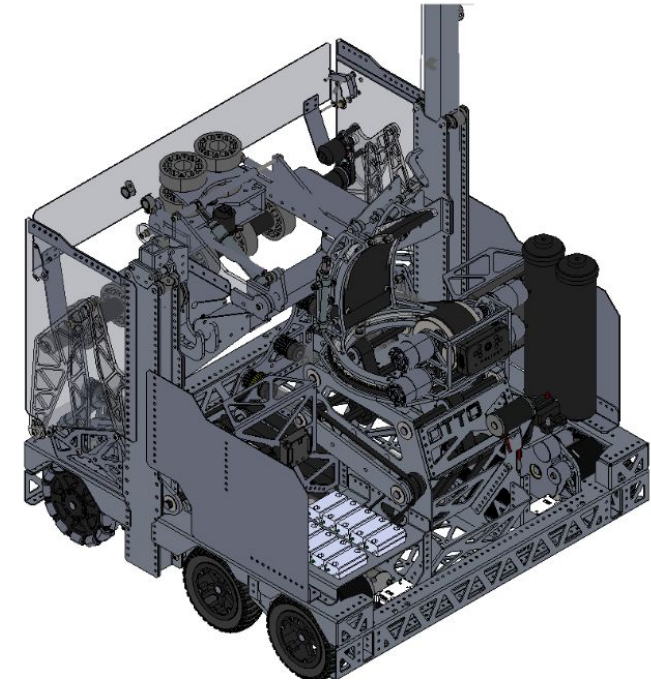
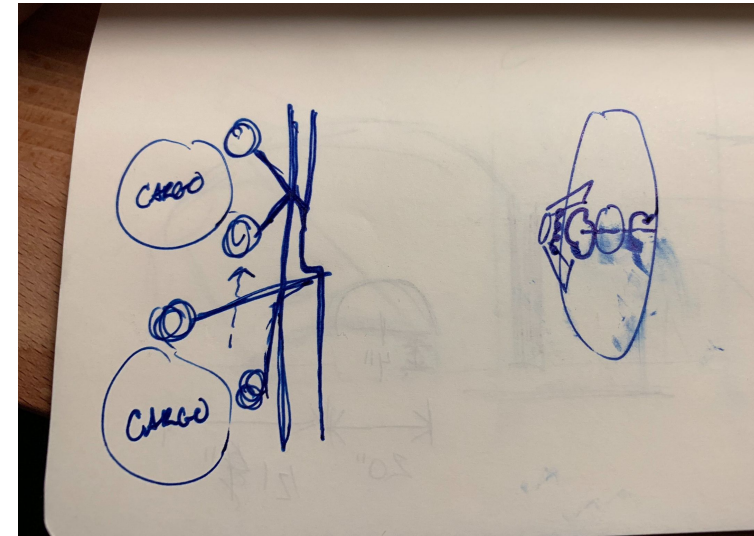
Team Communication

- Slack
 - *Main form of Team Communication*
- Trello
 - *Form of*
- Google Drives
 - *Storing Team Documentation*
- GrabCAD
- GitLab



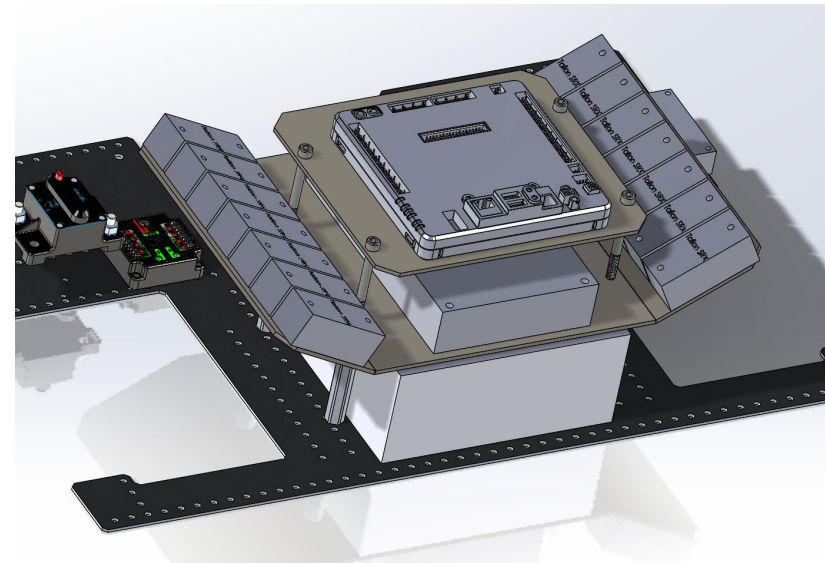
Mechanical Team

- Tasked with designing, manufacturing, and assembling the robot.
- Uses a lot of SolidWorks, but it is very important just to be able to think of designs.
- Can teach you skills in operators tools, including the shop tools in addition to computer operated machines.



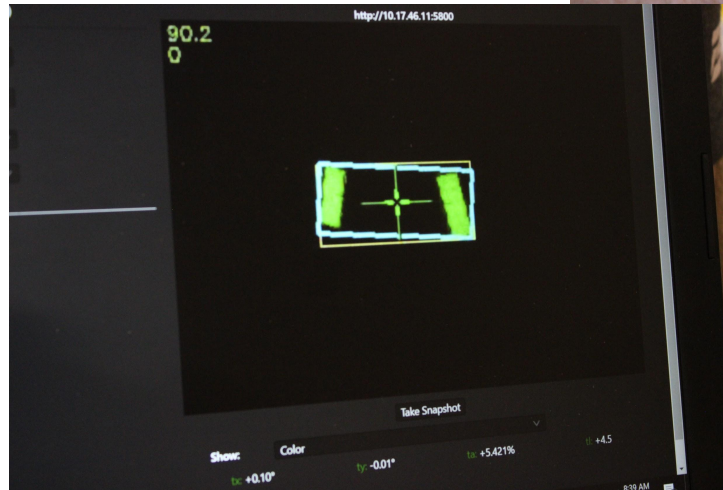
Electrical Team

- Mount electronics onto the robot
- A variety of motors, pneumatics, motor controllers, sensors, and control systems are used on the robot
- Wire and provide electrical power to different components of the robot



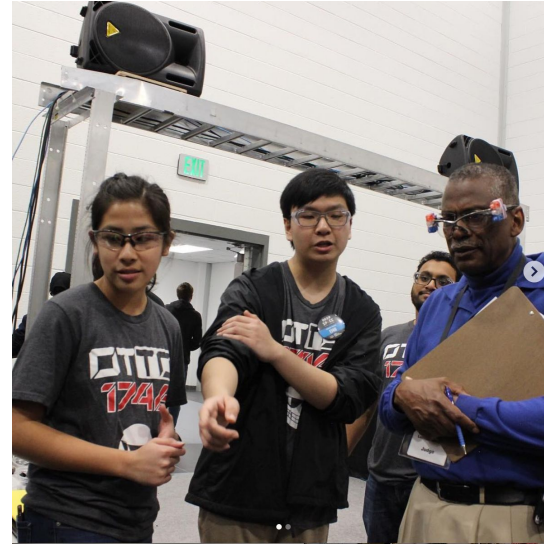
Programming Team

- Primary language: Java
- Code is used to automate robot functions controlled by an Xbox controller.
- The robot is autonomous during the first 15 seconds of every match



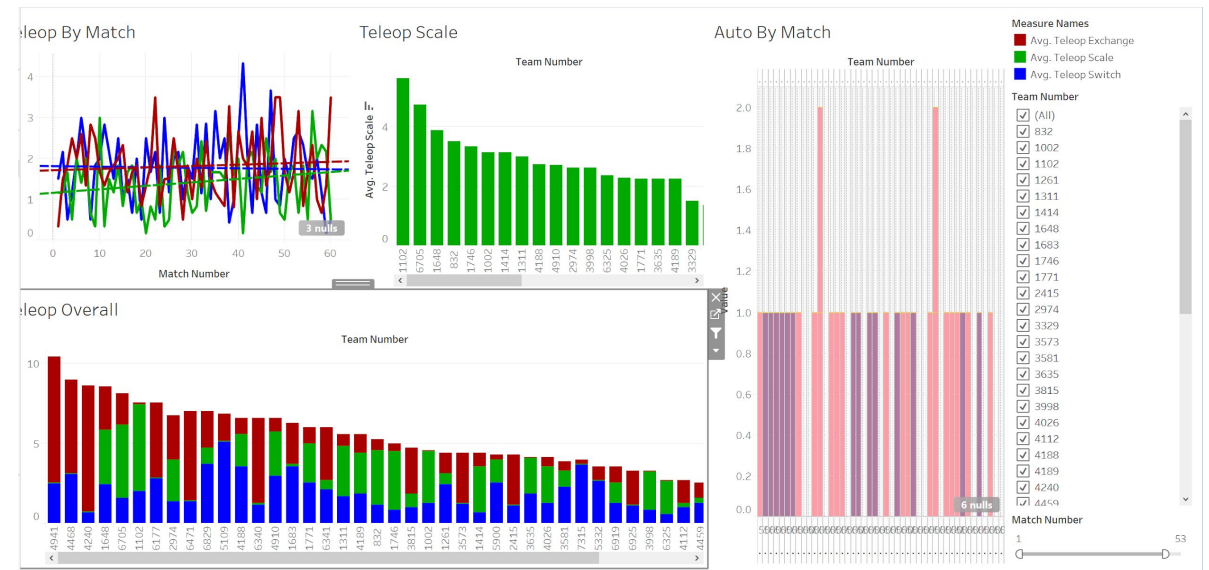
Business Team

- Sponsorships
- Branding
- Awards
- Media



Scouting Team

- Scouting team records match data and analyzes this data to win matches
- Everyone contributes to collecting data in competitions
- Scouting data is used for alliance selection, pick lists, and match strategy

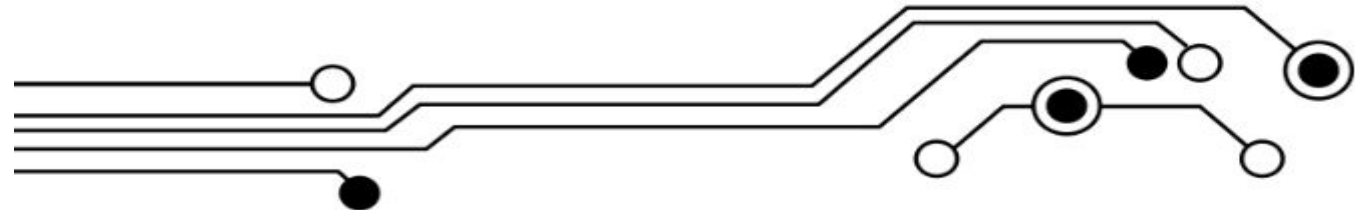
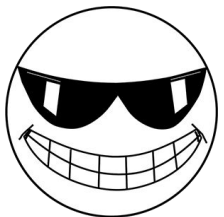
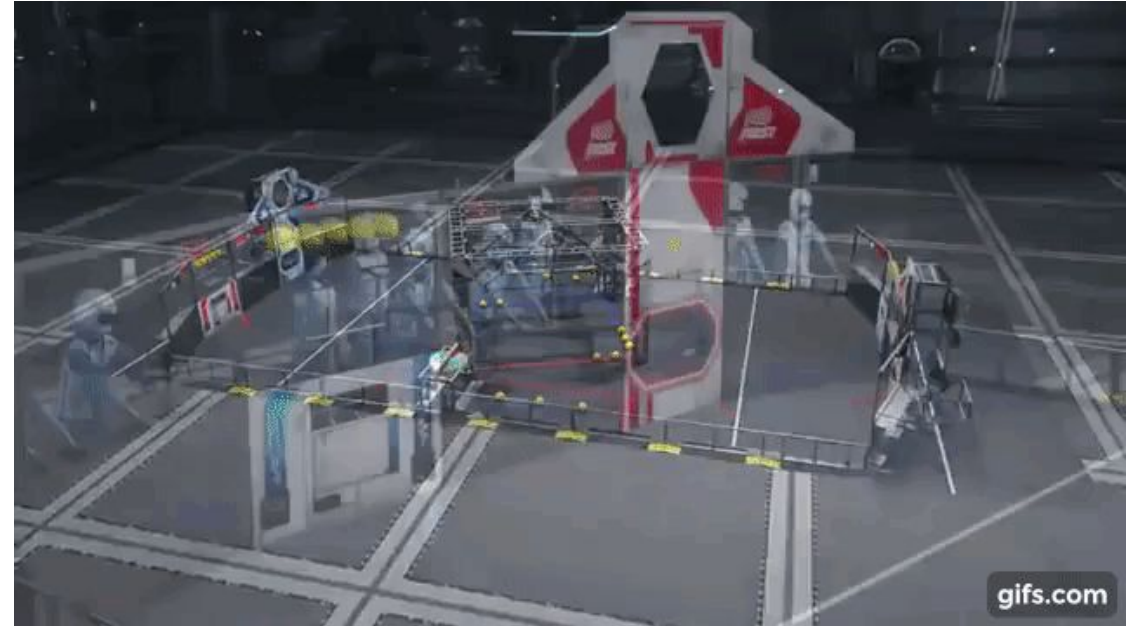


Build Season



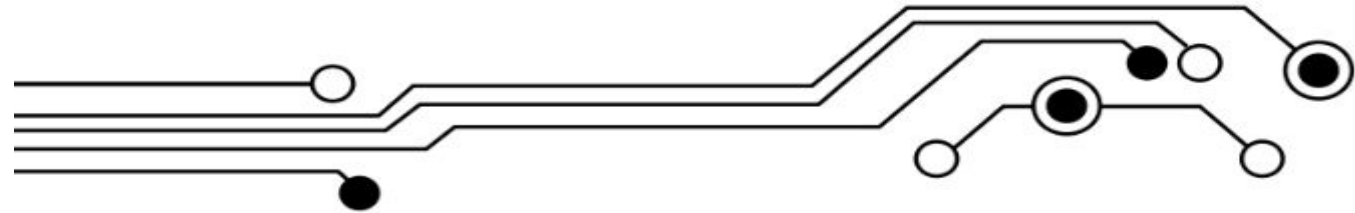
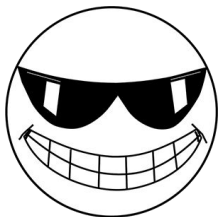
Kickoff

- Every year in January, FIRST releases a new game along with an explanatory video.
- Each game has a different objective and subsequent challenges.
- OTTO 1746 has run a local kick off at Forsyth Central High School for the past few years.
- Marks the beginning of build period in which teams design, build, and program a robot specific to the new game.



Changes

- The 2020 season was suspended as a result of Covid-19
- The 2020-2021 season will therefore be a replay of the previous year's game
- Rather than a strict "build-season", the entirety of the time now until the season end can be used to modify and build your robot
- Game changes will be announced at the start of the new year
- A team's robot from the previous season will be allowed



Meetings

- Current:

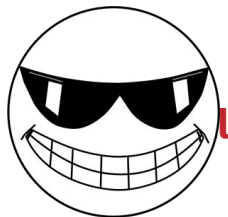
Training for sub-teams, sub-team calls vary

General meetings Wednesday at 5:30

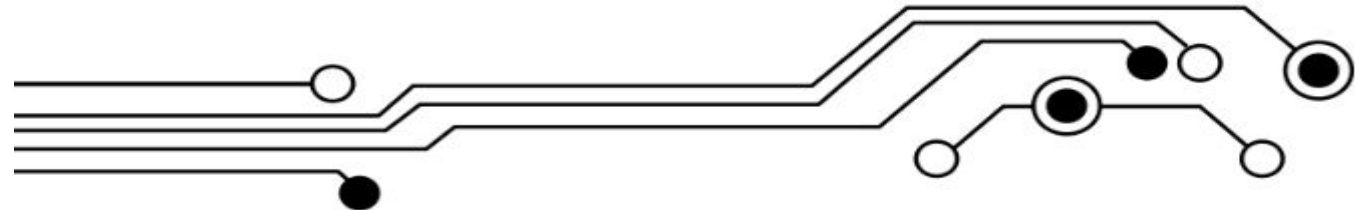
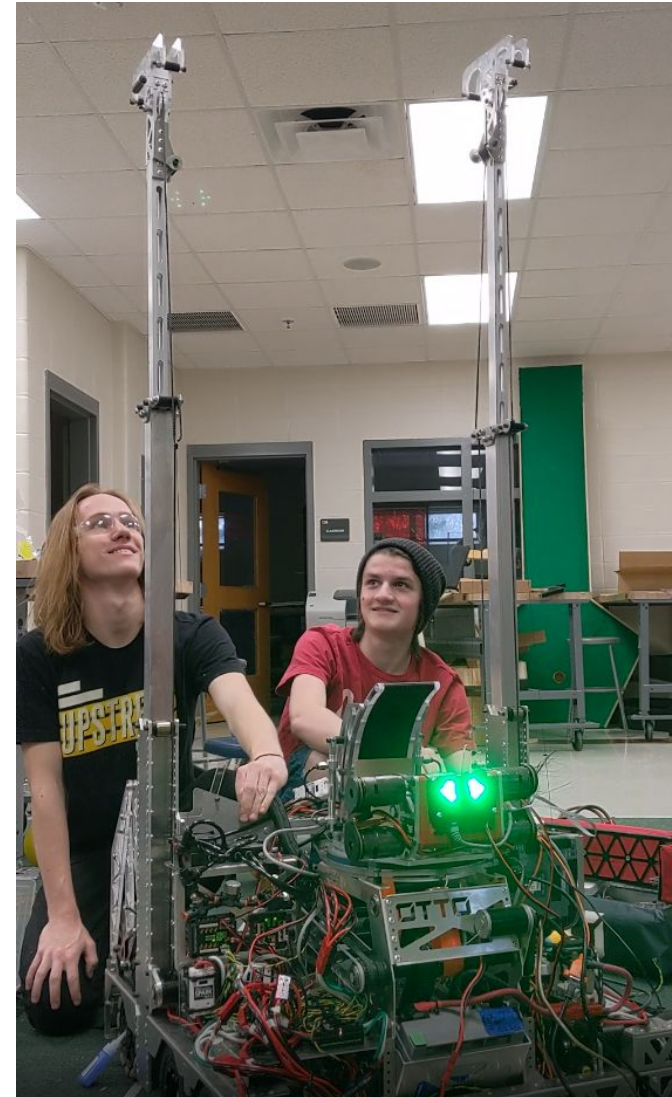
- Build Season:

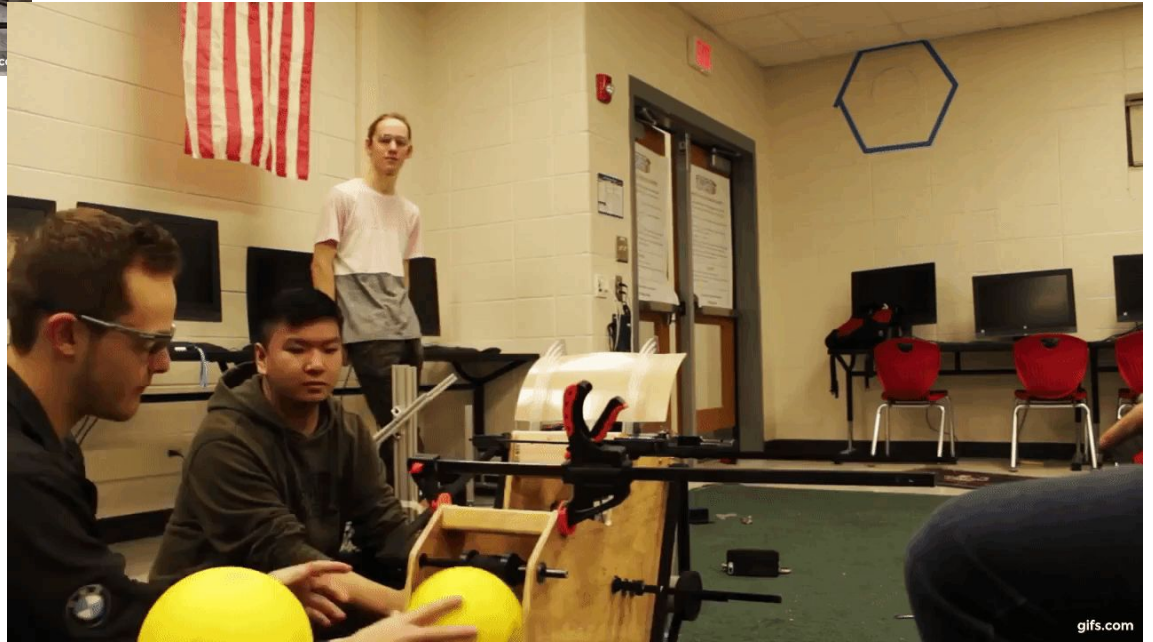
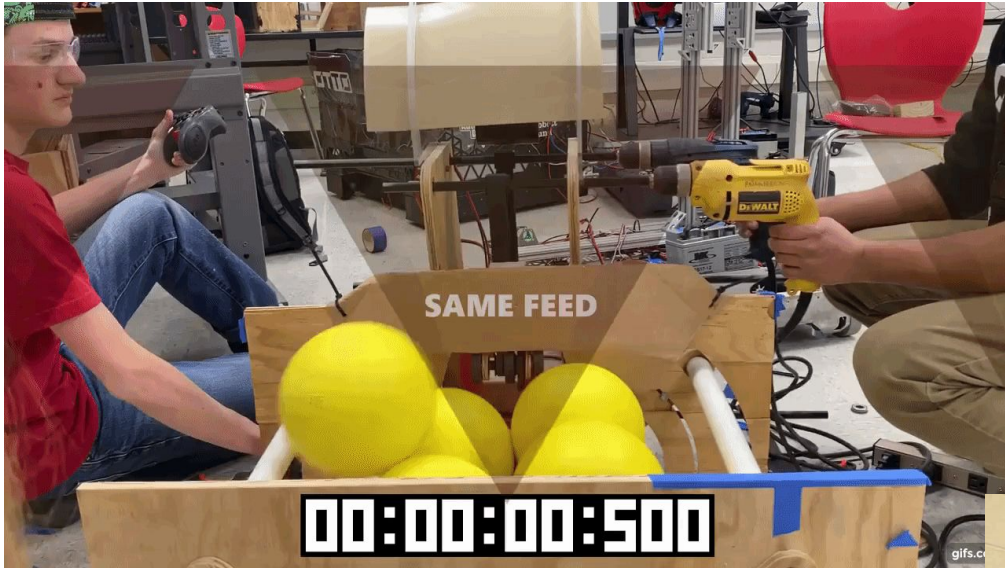
2 days a week after school until 9:00

Saturdays 8:00-3:00

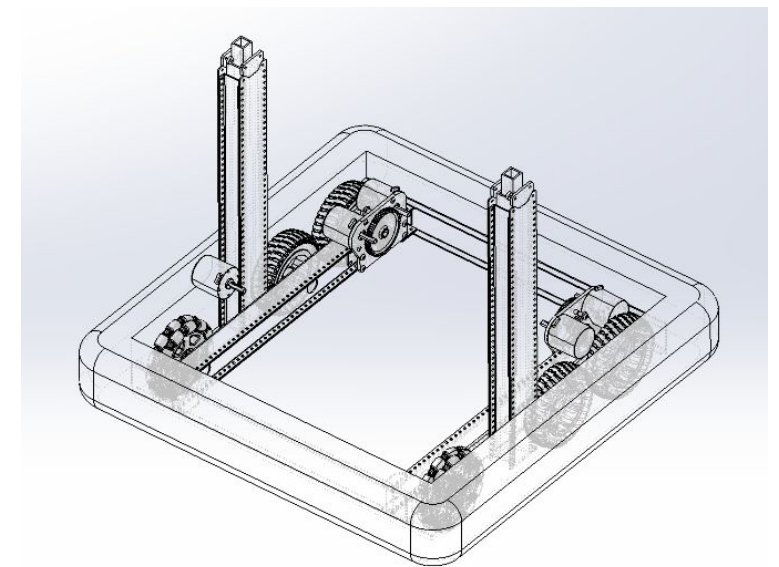
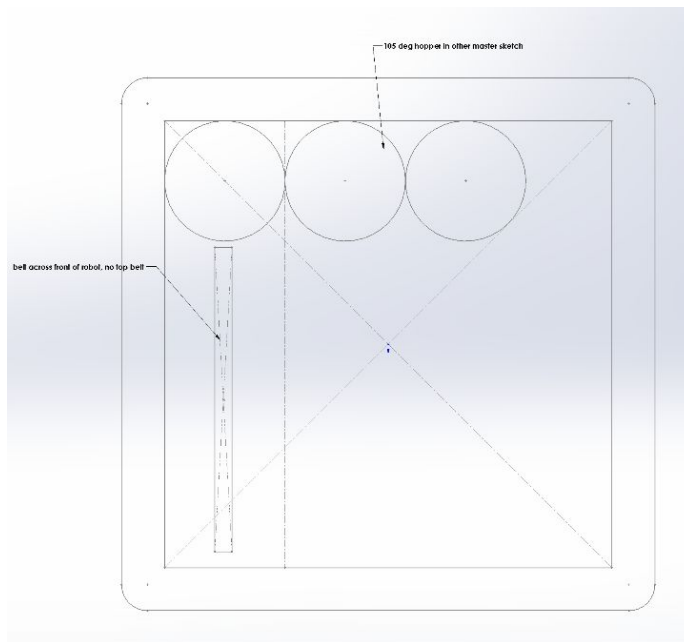
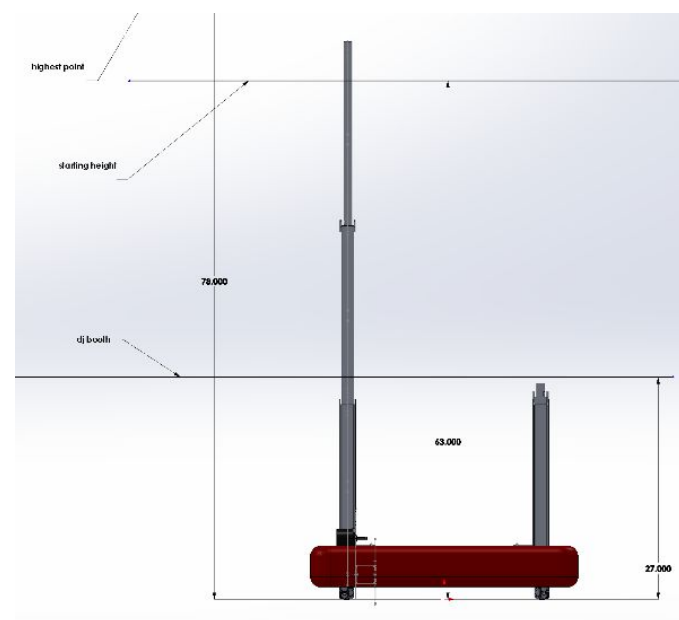
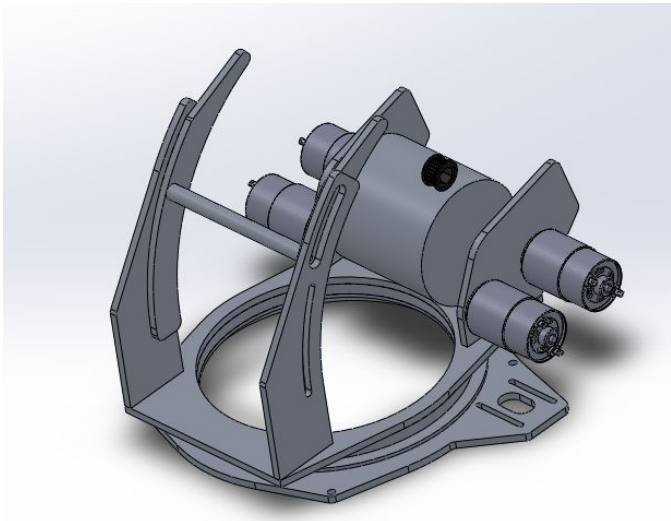


All meetings are not required

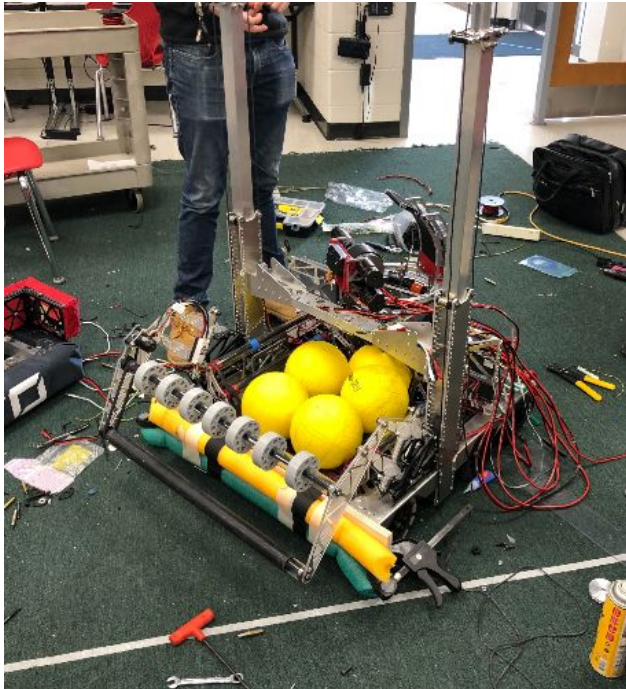
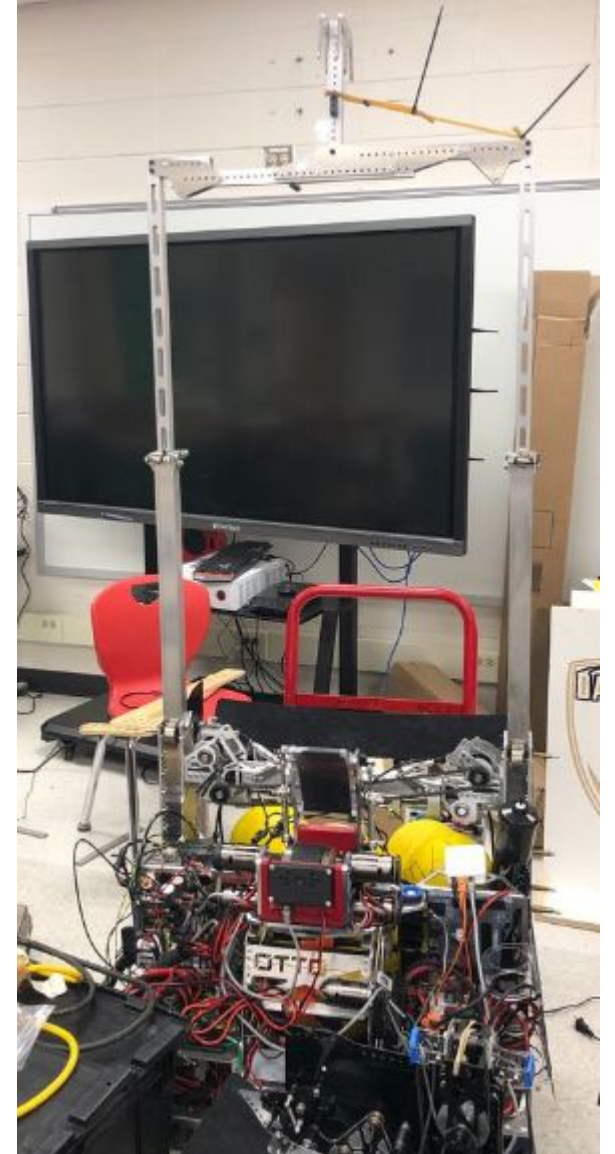
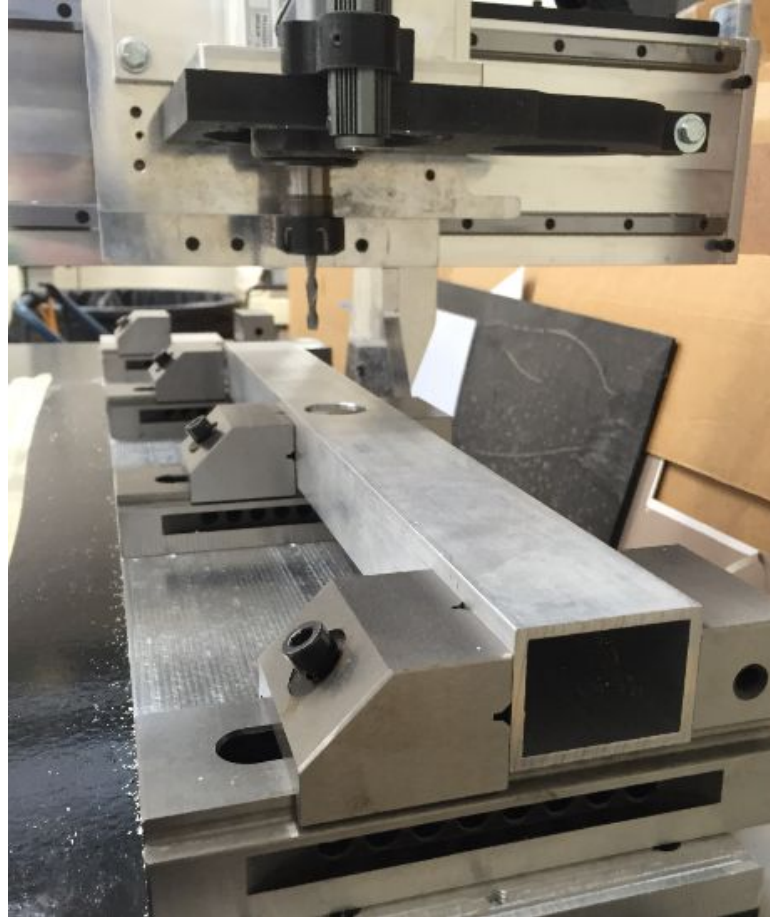
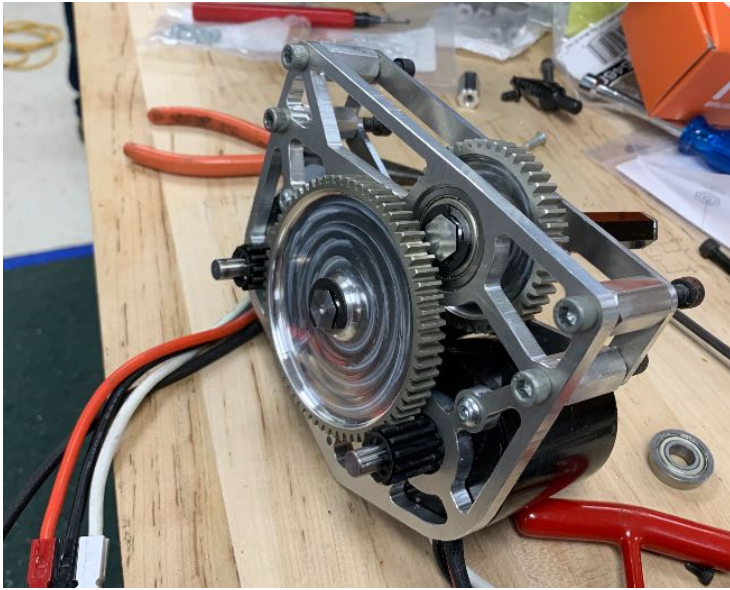




Prototyping and Testing



Initial CAD Design



Fabrication and Manufacturing

Competition Season



Georgia FRC

- 2020

Gainesville Event (Week 1)

Finalist

- 2019

Gainesville Event (Week 1)

Finalist

Forsyth Event (Week 5)

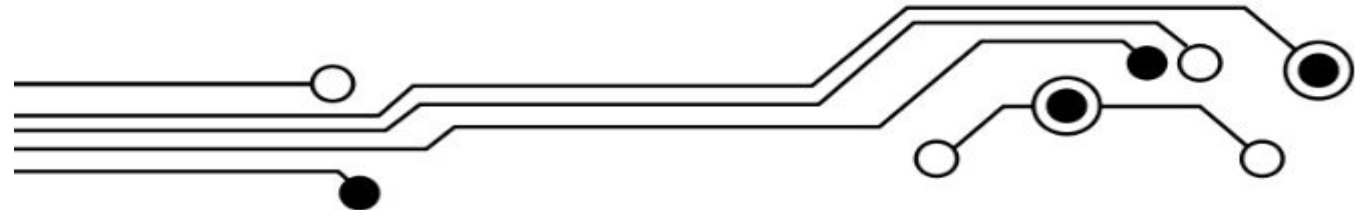
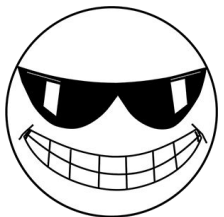
Winners

Qualified for State Championship

State Championship (Week 6)

Finalist

Qualified for World Championship



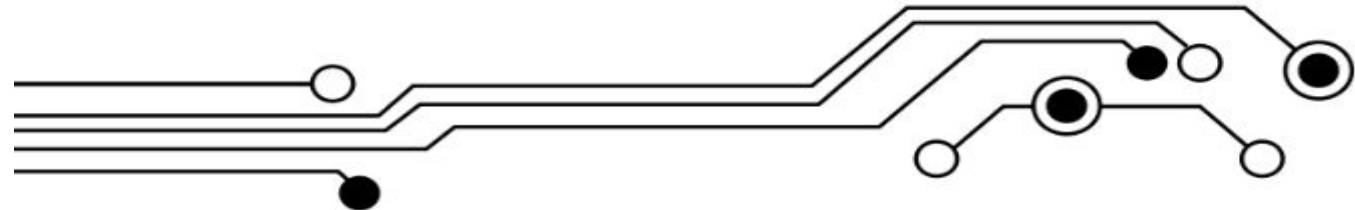
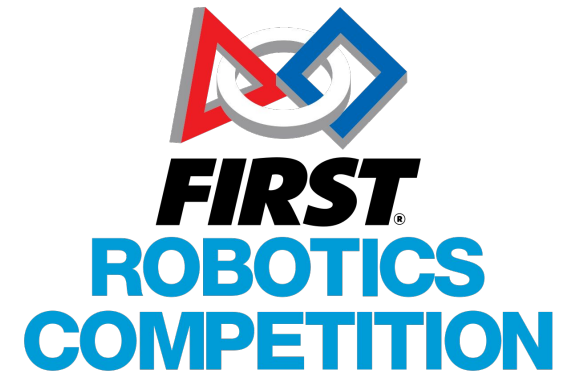
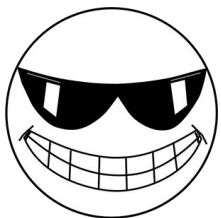
Upcoming Season

- Two District Events, March-April
8-9 Small One-Day Events

Smaller events, small team at the competition

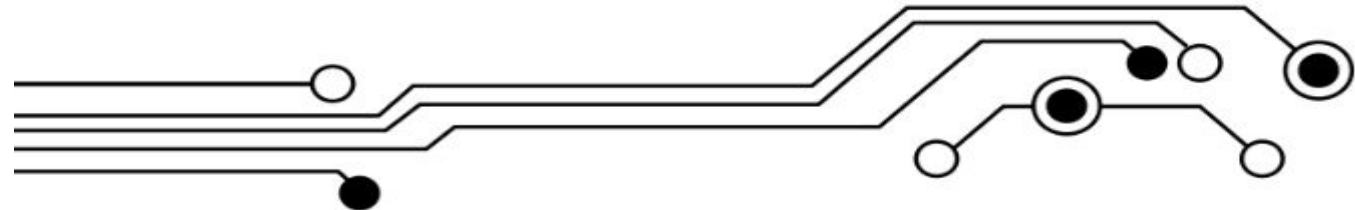
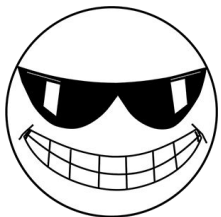
Rest of team will be at school

- State - top 18 teams, TBD
- World's - top teams TBD, Mid-July



2019 World Championship

- Final Event of 2019 season
- 14 students in attendance
- Record of 8-9 and was division finalists with 6443, 7426, and 2811
- District Finalist out of over 400 teams from around the world





Worlds 2019



Worlds 2019



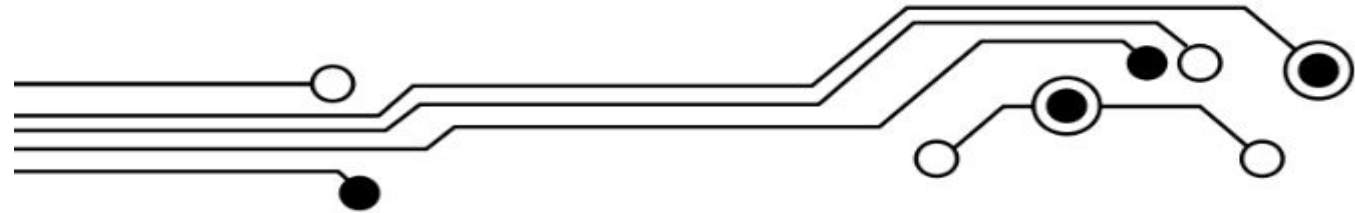
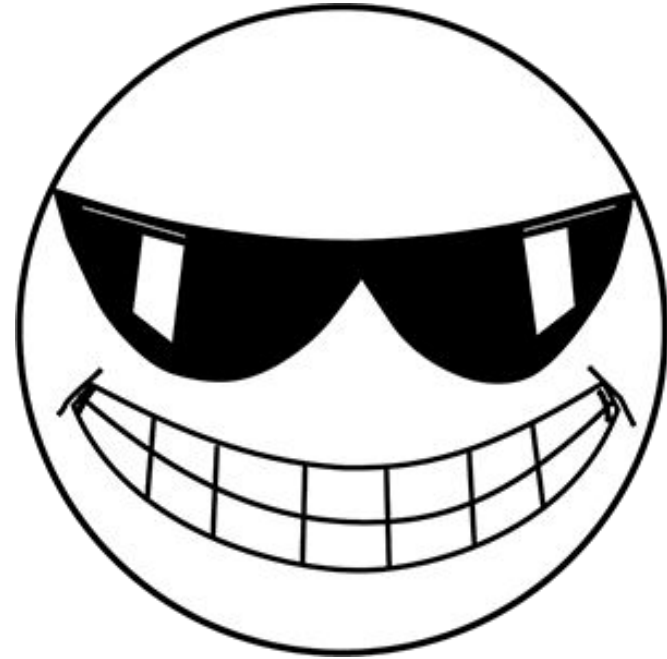
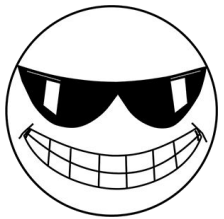
Worlds 2019

What's Next?



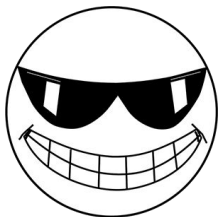
What's Next?

- Our team will be hosting various training calls for each sub-team
- If you are at all interested in these trainings, we will be having weekly calls



What's Next?

- Join Slack! Fill out the form with your email if you are interested.
- Get plugged into any interesting Sub-Teams
- Join the weekly training calls!



Join Slack Email Form:

