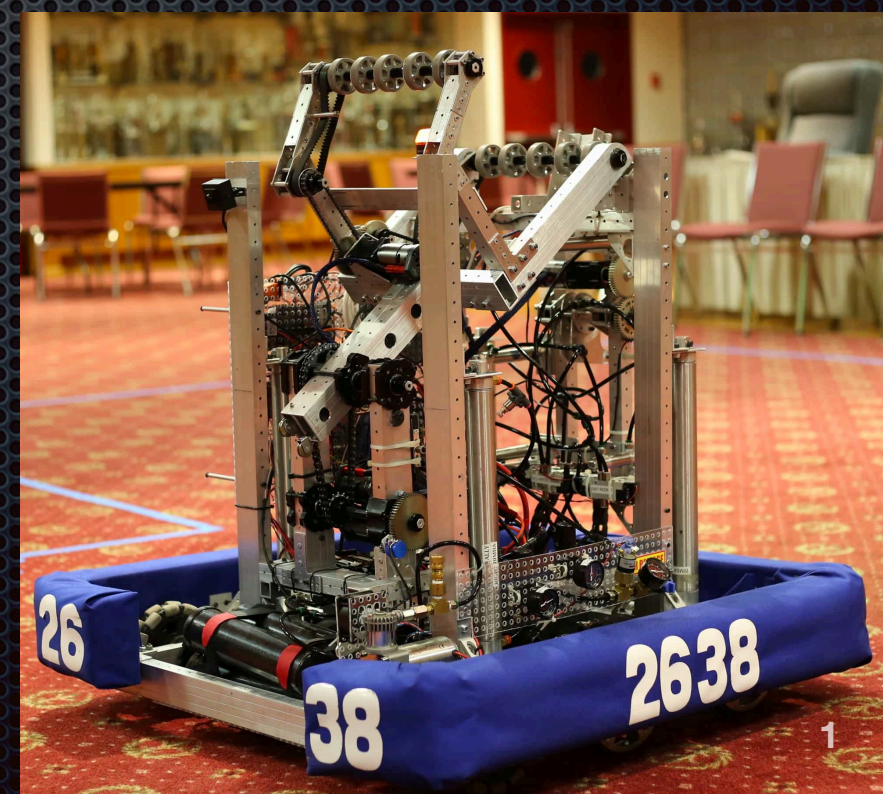




# Robotics

What exactly is this club all about???





# FIRST and FRC




**FIRST**  
**LEGO**  
**LEAGUE JR.**



**FIRST**  
**LEGO**  
**LEAGUE**



**FIRST**  
**TECH**  
**CHALLENGE**

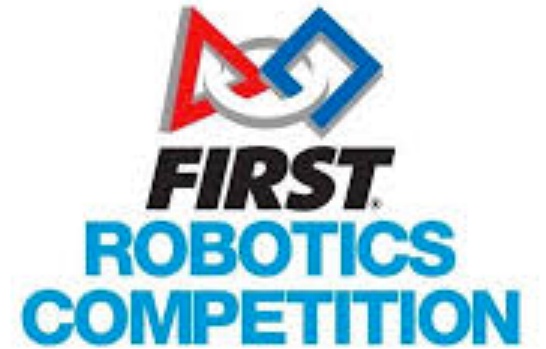


**FIRST**  
**ROBOTICS**  
**COMPETITION**

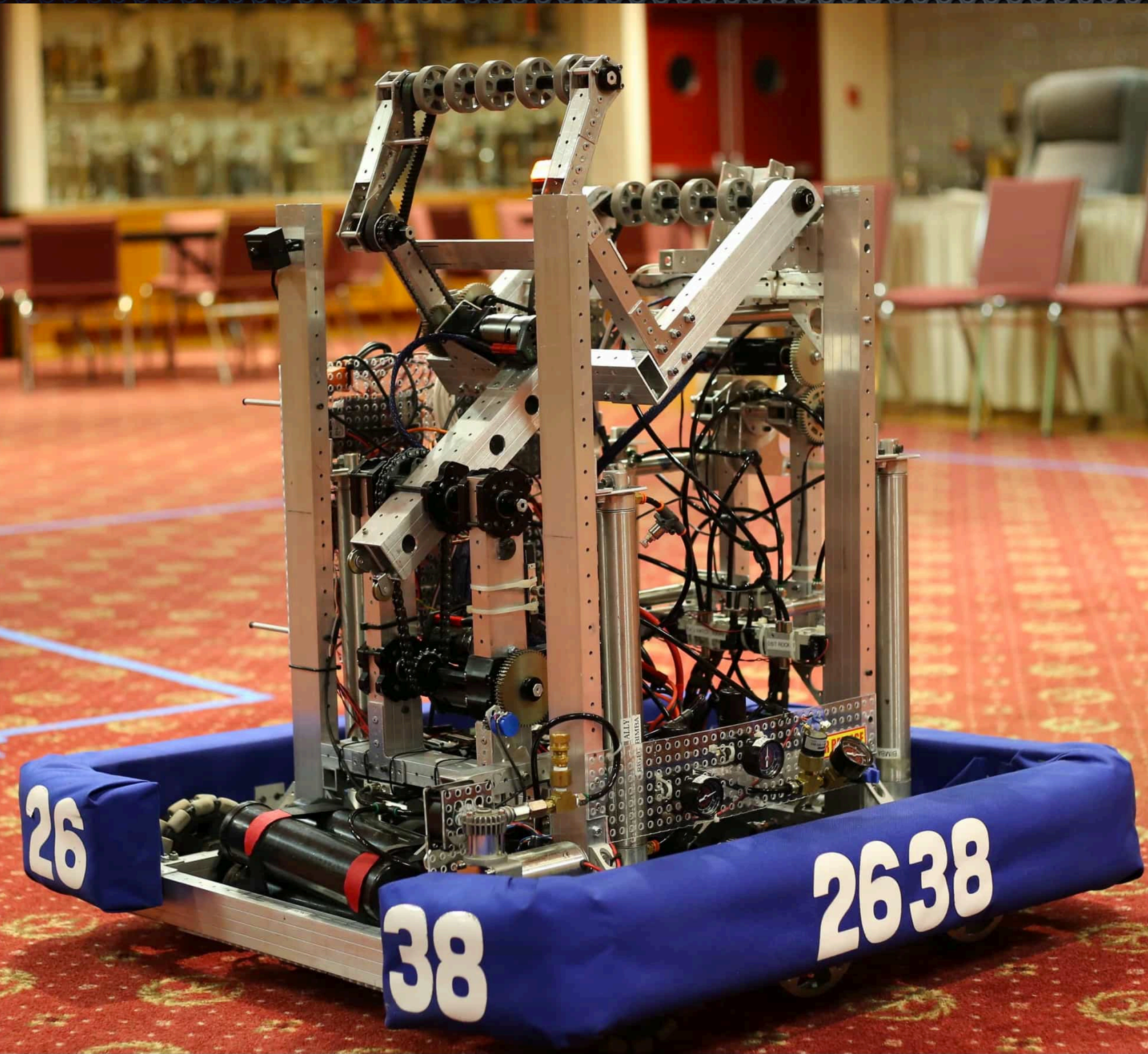




# FIRST and FRC



- 125 lb robots
- ~4,000 teams around the world (2019)
- Participate in competitions around the country





# Our team



- Team name: Rebel Robotics
- Team #: 2638
- Founded during the 2007-2008 season

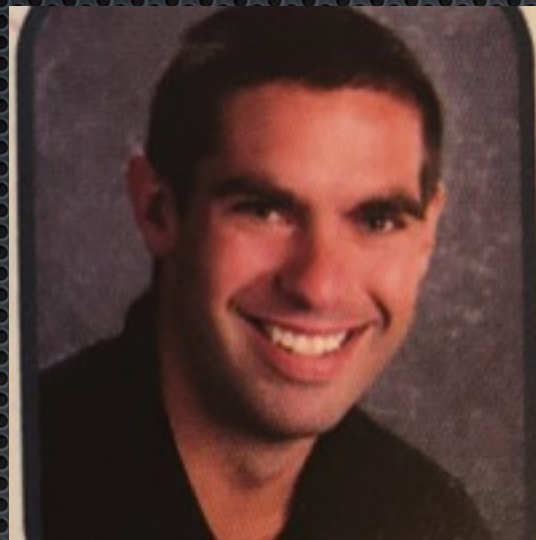




# Our team - Mentors



“Motch”



Mr. Corrigan



Mrs. Zinn



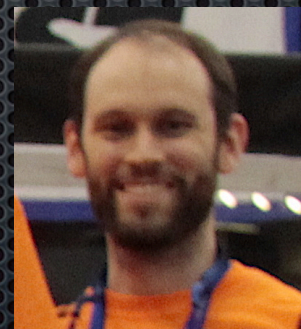
Mrs. Dressner



“Big Mike”



“Squeegee”



Tom Donlon



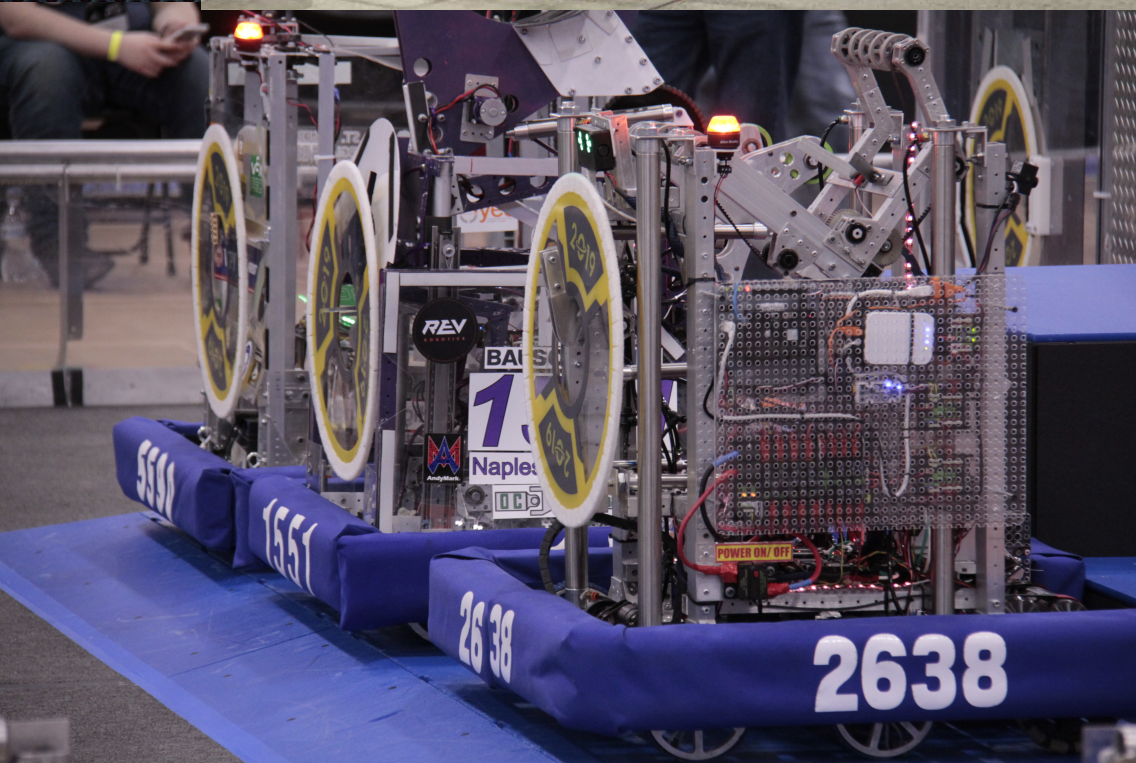
Robin Fleishman



# How FRC Works - Overview

Technical

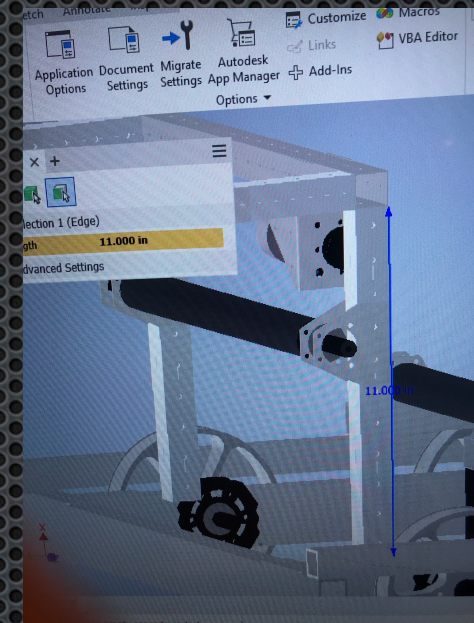
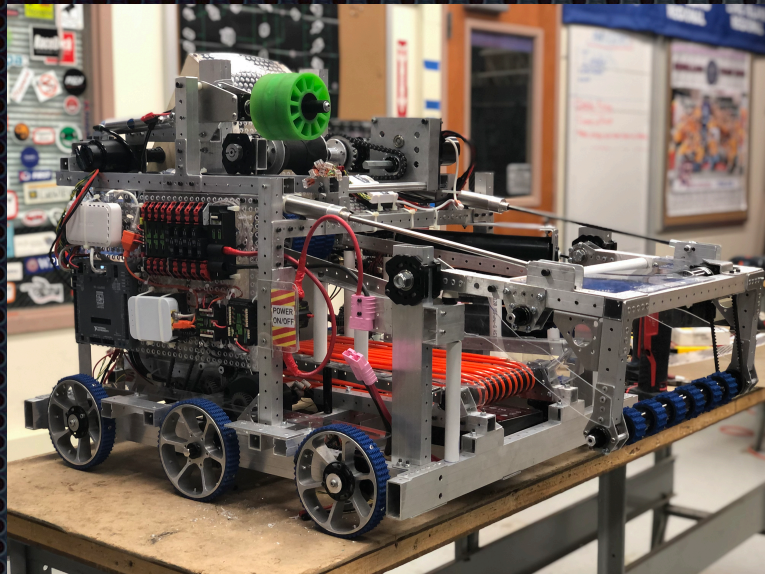
Non-Technical





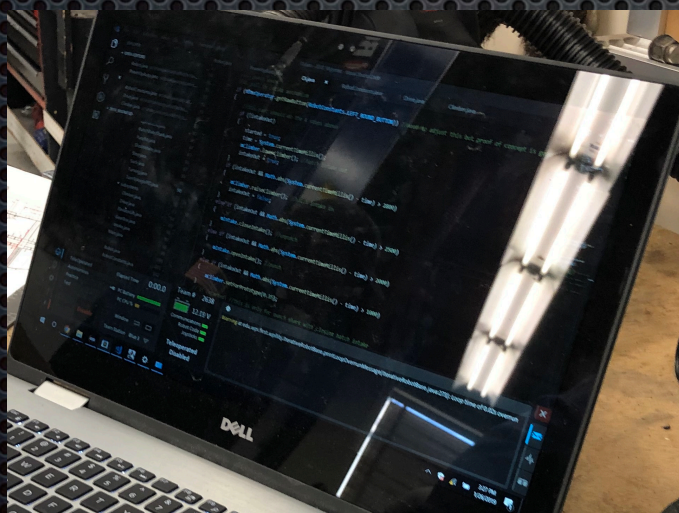
# How FRC Works - Overview

Technical



Design & Building

Computer Aided Design



Programming

Scouting/Strategy



# How FRC Works - Overview

## Non-Technical



Award Books



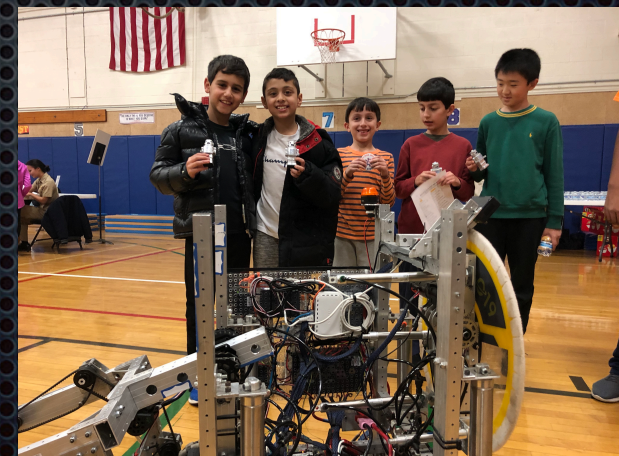
Merch

<https://www.gnsrobotics.com/merchandise/>



Digital & Social Media

<https://www.gnsrobotics.com/media/videos/>



Outreach



# How FRC Works - Robot Game

**It's NOT BattleBots!**





# How FRC Works - Robot Game

- In FRC, we are tasked to build robots to accomplish certain tasks. It's like playing a game with robots
- Each year, there's a different theme to the game



2019 Game

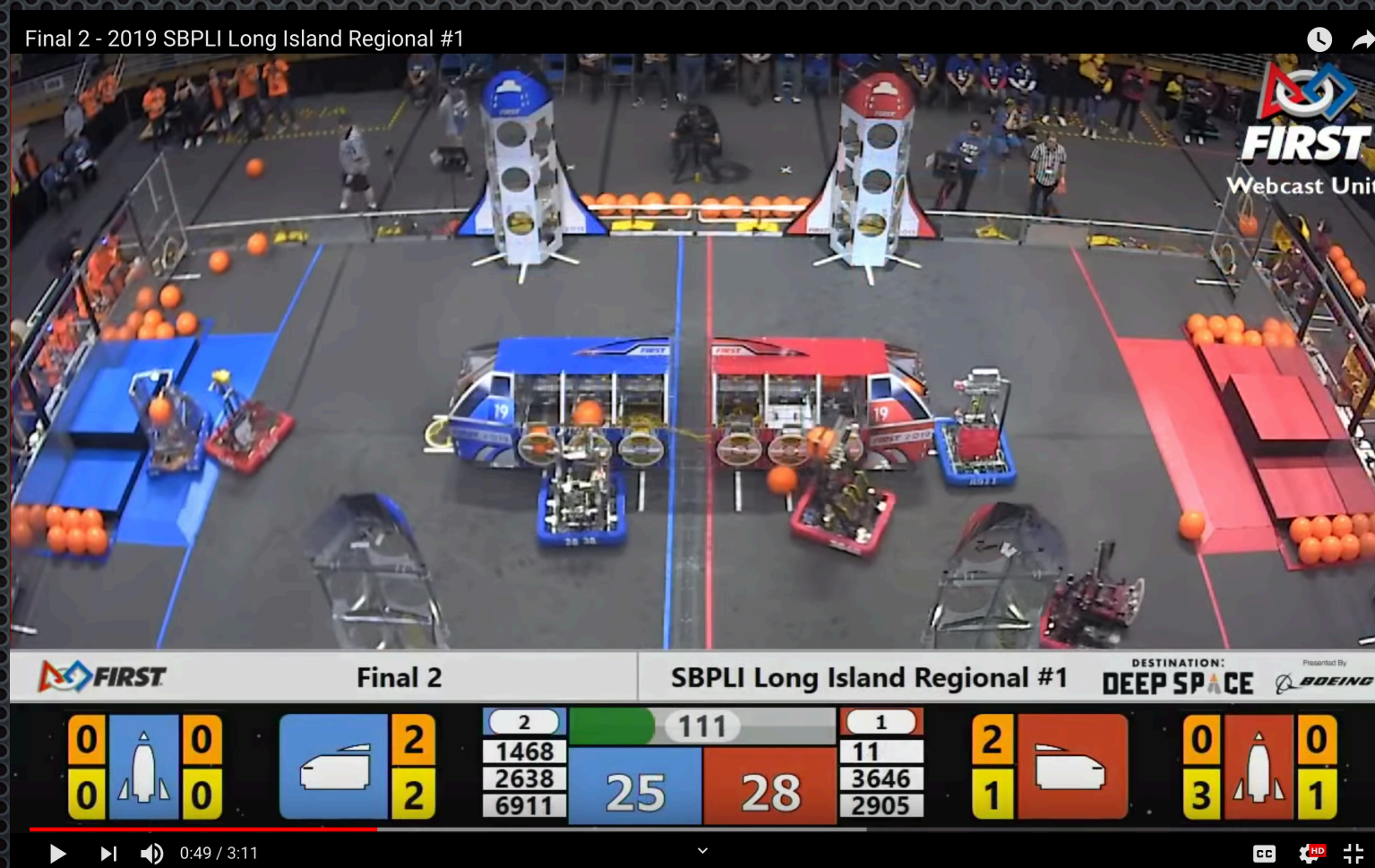


[https://www.youtube.com/watch?v=Mew6G\\_oG-PI](https://www.youtube.com/watch?v=Mew6G_oG-PI)



# How FRC Works - Competitions

- At competitions, we compete with other teams who have built robots to accomplish the tasks
- By completing these tasks, teams earn points



<https://www.youtube.com/watch?v=F-yXQfXpwU>



# This Year's Game





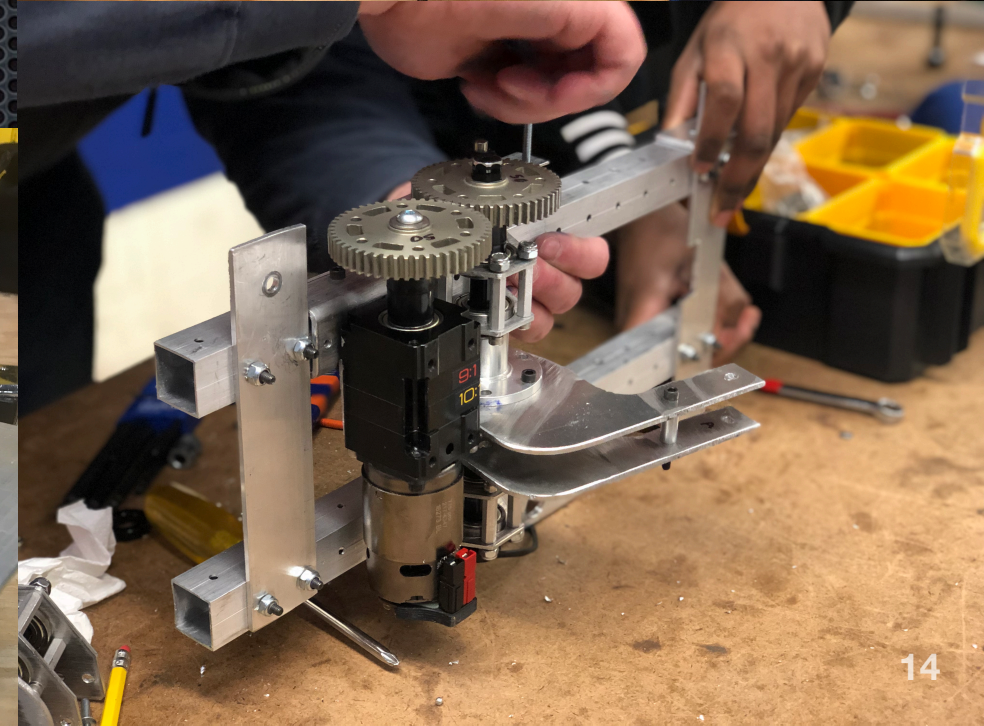
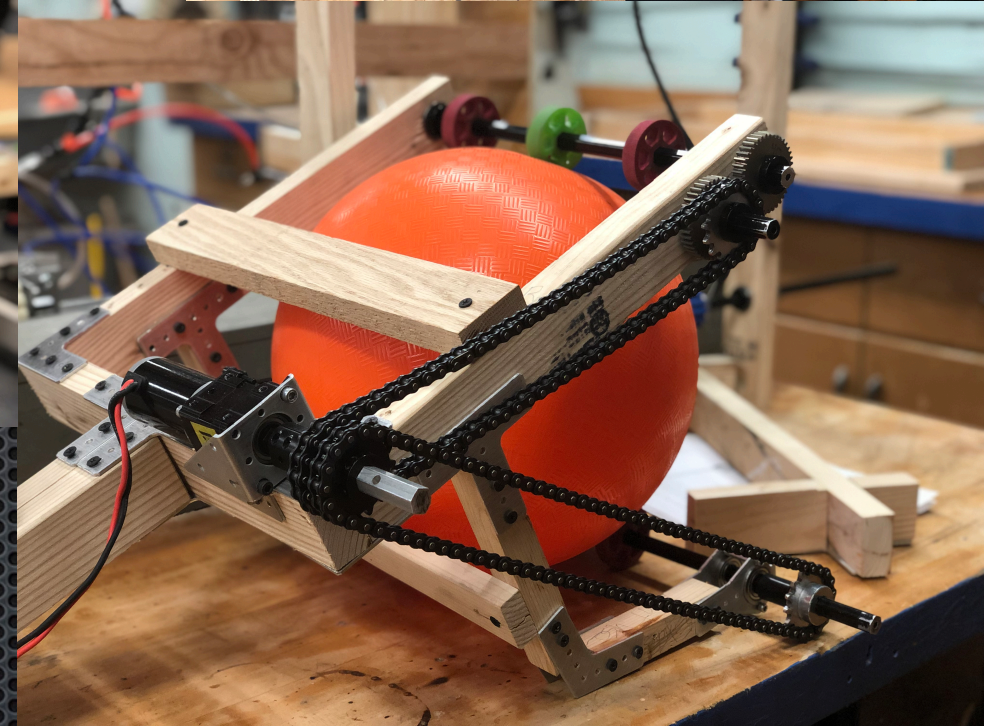
# This Year's Schedule???

- ✦ **September – December:** Informational meetings, workshops (machine lessons, tool lessons, etc.)
- ✦ **Jan 2020:** Kickoff day! The rules to this year's game, Game Changers, are revealed. We can now begin work on the robot
- ✦ **Build Season (Jan – mid-Feb):** This is the time when we actually build the robot
- ✦ **March & April:** Two regional competitions
- ✦ **Early August:** World Championships (if we make it...)



# Build Season

- ✦ Strategy
- ✦ Prototyping
- ✦ CAD (Computer Aided Design)
- ✦ Fabrication out of metal
- ✦ Programming
- ✦ Drive testing





# Common Questions

**Do I need to know anything about robotics beforehand?**

**Are there tryouts?**

**Is it true that I will need to stay every day during the Build Season until late at night?**



# Common Questions

**No!**



# Common Questions

**Do I need to know anything about robotics beforehand?**

**Are there tryouts?**

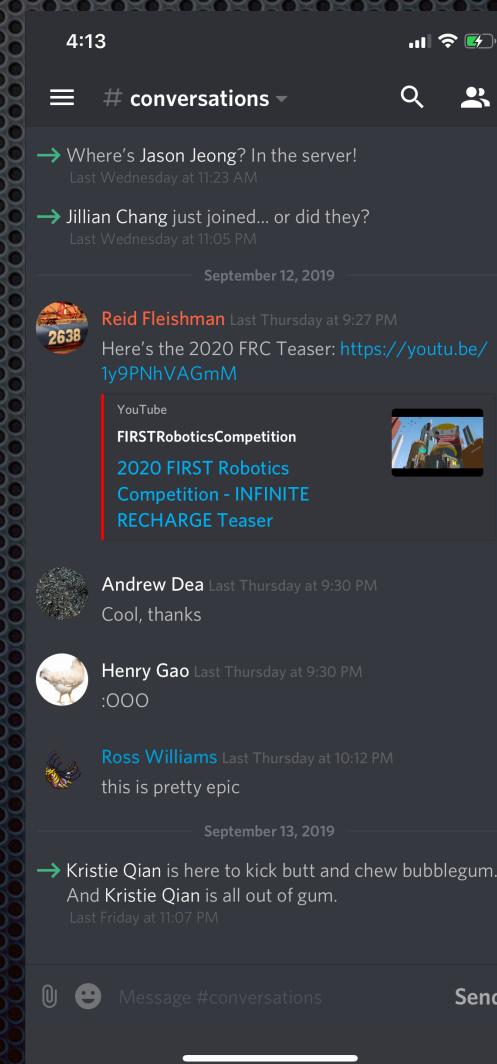
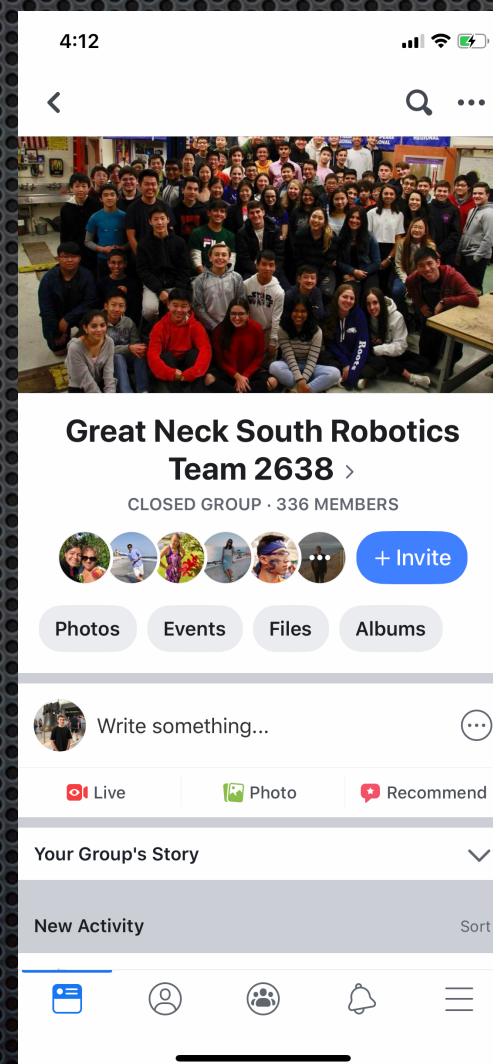
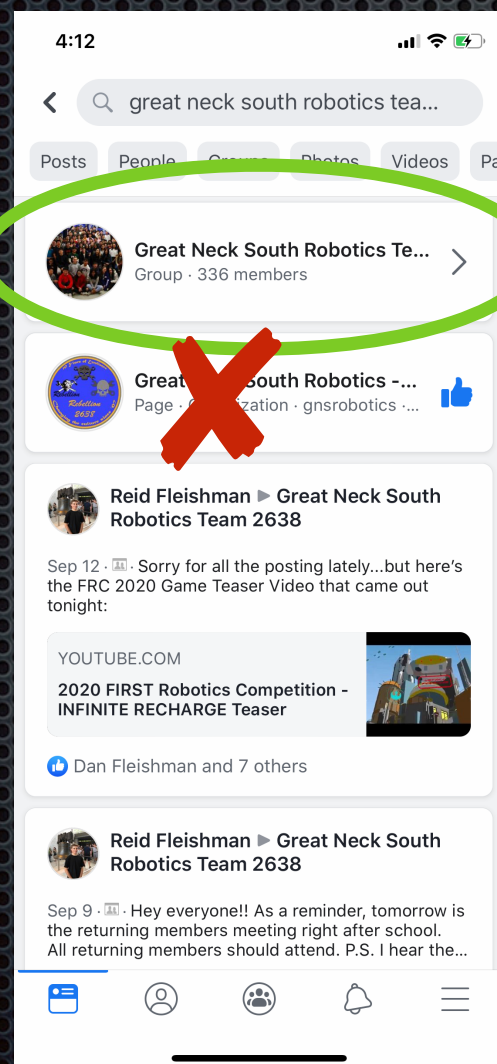
**Is it true that I will need to stay every day during the Build Season until late at night?**



# Facebook and Discord

Facebook: [gnsrobotics.com/facebook](https://gnsrobotics.com/facebook)

Discord: [gnsrobotics.com/discord](https://gnsrobotics.com/discord)





# Team Resources

- ✦ **Members Website:** [gnsrobotics.com/members](https://gnsrobotics.com/members)
  - ✦ Many, many things will be posted on here, including important announcements
  - ✦ There are also resources to help you learn



# Other Tidbits

- ✦ **Instagram:** @rebelrobotics2638
- ✦ **Team Website:** [gnsrobotics.com](http://gnsrobotics.com)
  - ✦ There's a lot of nice stuff on here. I suggest you browse through it a bit.
- ✦ **iMessage Sticker Pack:** <https://apps.apple.com/us/app/2638-stickers/id1460620834>
- ✦ **Team pics since 2008 (for your enjoyment):** <https://www.gnsrobotics.com/media/photos/>