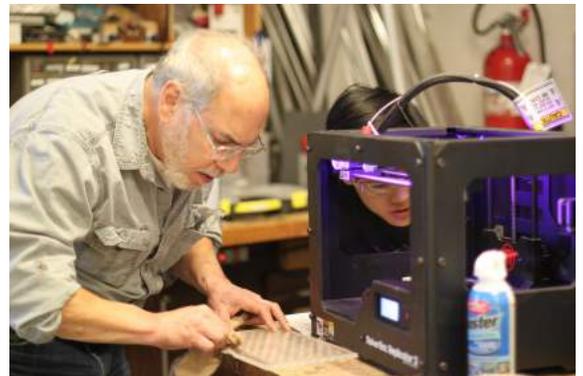
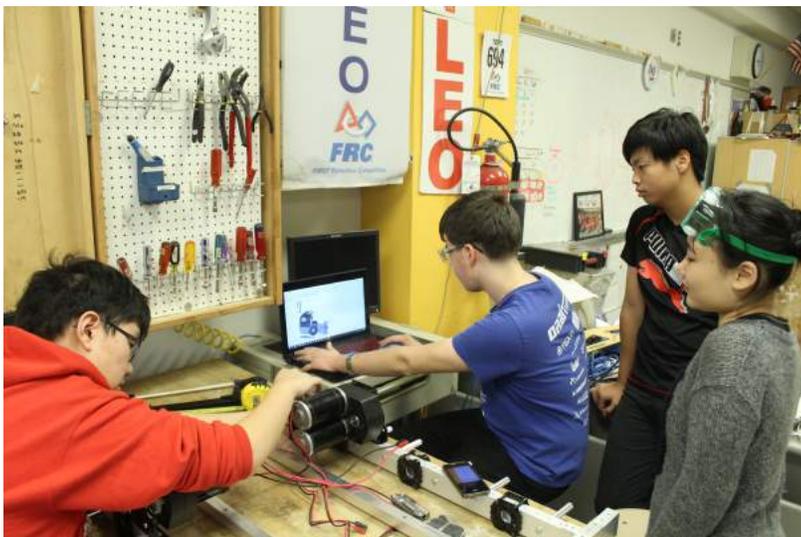


ENGINEERING

Members continued work on completing all the mechanisms for the robot. The drivetrain was completed and will be tested in the upcoming week. Members also worked on the gear mechanism which was completed and attached to the drivetrain, and the gear gate was adjusted due to concerns about stability. In addition, the blender was completed and mounted on the drivetrain. It was also adjusted due to problems with consistently feeding into the shooter. As well, the shooter was mounted on the drivetrain and members managed to fix the bots' side to side inconsistencies. The winch is on its way to completion, and after much prototyping, it was decided that our bot will use the slipknot idea for the rope which allows the bot to get maximum wrappings around the drum before climbing. Moreover, all field construction projects were finished. Lastly, members worked on making the "parking lot" for electronics, which is a way of mounting that allows us to put all the electronics components in a compact space.



SOFTWARE ENGINEERING

For computer vision, members worked on two tasks. For the task of using vision to score gears, members wrote and tested code for driving along a preset path. They also wrote a linear regression to successfully get the distance to the reflexite strips of the lift. For scoring balls in the boiler, other members wrote code to move to the shooting range of the boiler and aim at it, and wrote code for two algorithms to autonomously move to the hopper, where the bot with balls to score. Furthermore, older members and newbies worked together to write code for interacting with devices. They tested reading from several sensors, including an infrared sensor, several sonar sensors, encoders, and a gyro. They also programmed an Arduino to act as a micro-controller for a motor, where the motor's speed can be set turning a knob. In addition, newbies worked in groups on the high-level functions of the robot. Code for the ball gate and commands for manually and automatically opening/closing it was written, as well as the code to control the Winch and gearshifting of the drivetrain. Finally, they began work on several autonomous routines for scoring points.



MARKETING

This week, the Marketing team was able to finish the first draft of the Chairman's Essay and Dean's List Nomination. The Woodie Flowers essay went through a second round of edits, and work on the Entrepreneurship Award continued. In addition, the Stuyvesant Parent's Association Appropriations form for the Spring round was started and will be submitted shortly. Looking ahead to competition, we began brainstorming possible ideas for a competition game similar to the one that was a big hit last year at NYC Regional.



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IMPORTANT DATES!

Last Day of Build Season 2/21

South Florida Regional 3/1 - 3/5

New York Regional 4/6 - 4/9

St. Louis World Championship 4/26 - 4/30

