



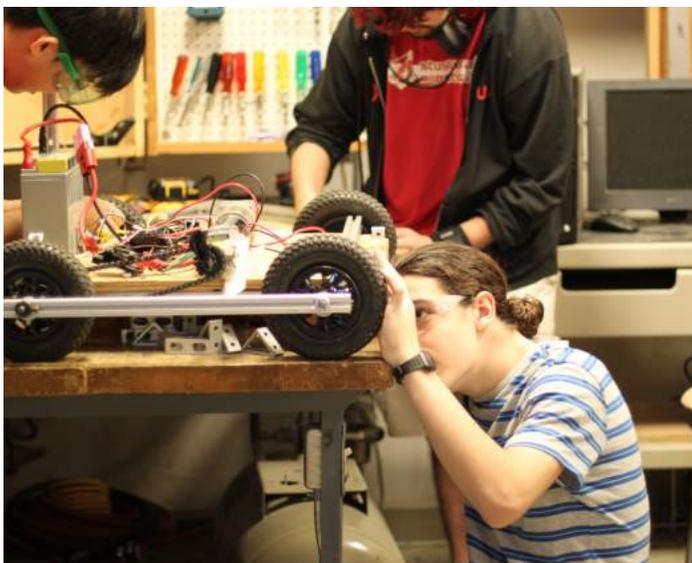
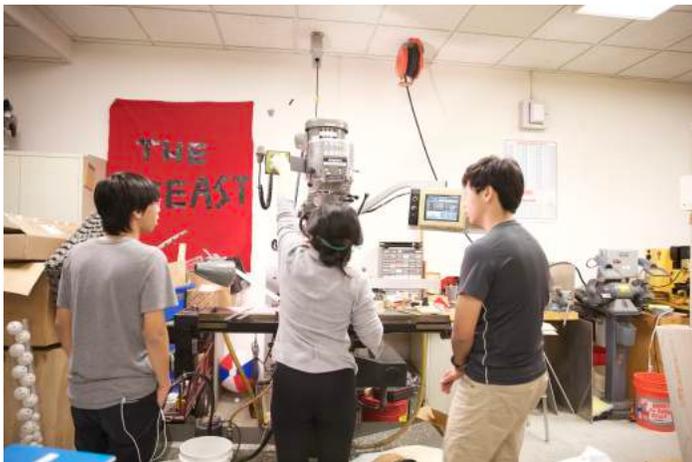
Stuyvesant Robotics

BUILD SEASON WEEK 3 NEWSLETTER



ENGINEERING

Members continued to work on field construction, cutting pieces for all the parts and assembling them. For the shooter, members tested the prototype and based on that, fixed the wheels and curvature and therefore, received more side to side consistency. They also resumed making the parts for the real shooter. For the drivetrain, the basic chassis was worked on in which members made, organized and assembled the various parts. Meanwhile, for the practice drivetrain, members worked on mounting the shooter and feeder prototypes. For the blender, the hopper was temporarily attached and Lexan was cut for most of the parts of the blender and the hopper. They started to assemble the hopper, and the L mounts were measured, but not cut. Members also worked on the winch, where gearboxes were assembled and the first shaft was attached to the practice drivetrain. In addition, the second shaft was worked on. For the gear mechanism, PVC pegs, gear gates, and the pusher was made, and all the pieces were cut and the holes were drilled. Members started to assemble all the parts, and will continue in the coming week. Lastly, for electronics, members made cables for the robot's many sensors, and worked on the new battery meter.



SOFTWARE ENGINEERING

For the robot code, members finished writing the drivetrain with encoders, and laid the framework, wrote and reviewed the code for the different subsystems of the robot, such as the Blender, Shooter, Gear Trap and Gear Pusher. They also wrote and reviewed the commands that control each subsystem. For Computer Vision, a lot of progress was made. Curved movement was tested, and members discovered that it was inconsistent. Methods for plotting a path to the lift target were written, and the code for the arc movement for the Boiler CV auton was written and tested. Members also took test images of the peg target, and implemented code to get relative positions to the left and right reflexitape.



MARKETING

Members continued to work on the awards, filming for the Chairman's Video, and writing and editing the Dean's List Award, Woodie Flowers Award, Entrepreneurship Award and Chairman's Essay. Photos and videos of the team continued to be taken, and buttons were made so that they can be given out during competitions. Lastly, in preparation for competition, members started to build the pit and worked to make the pit easier to put up.

CONTACT US!

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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

