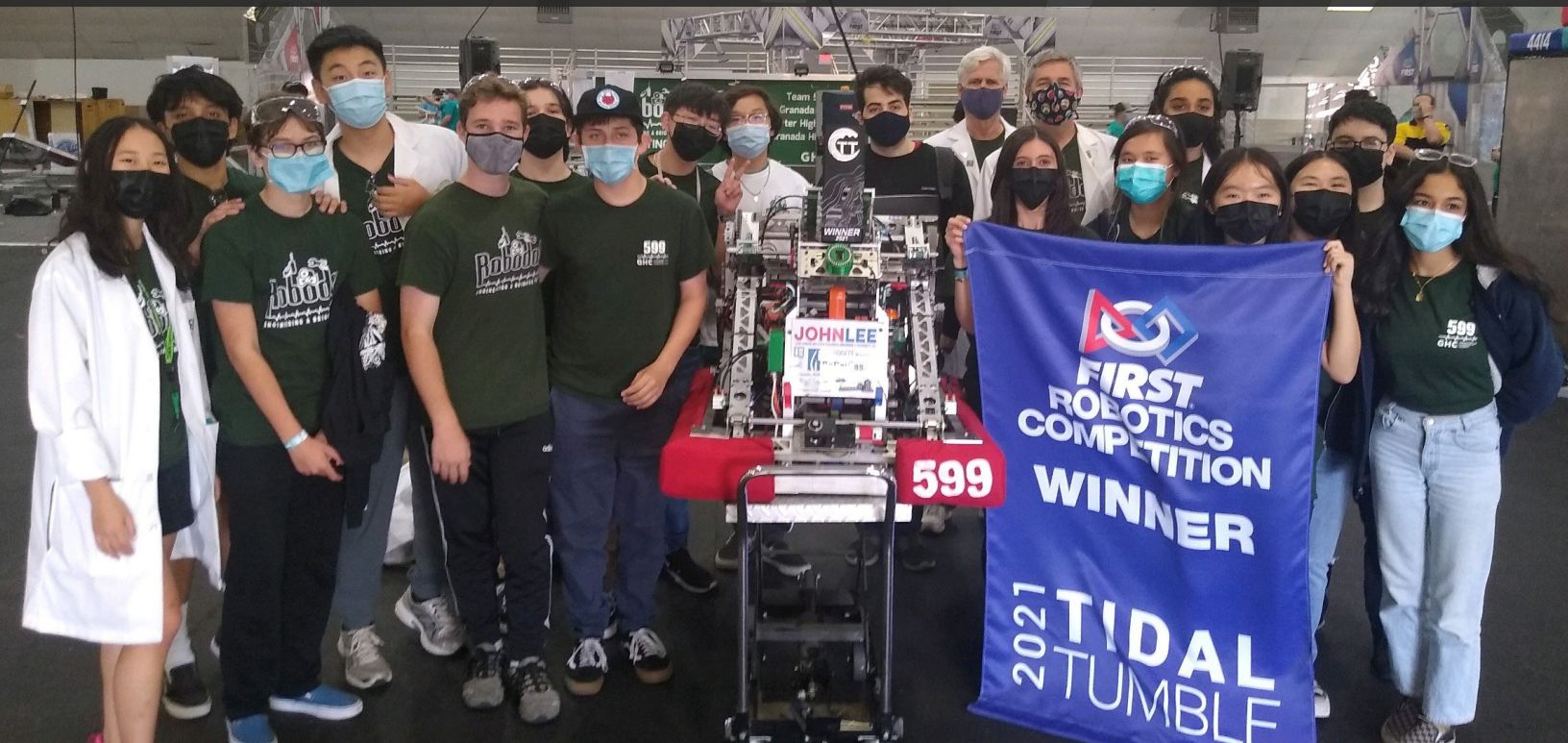


ENGINEERING A BRIGHTER FUTURE
TEAM NEWSLETTER



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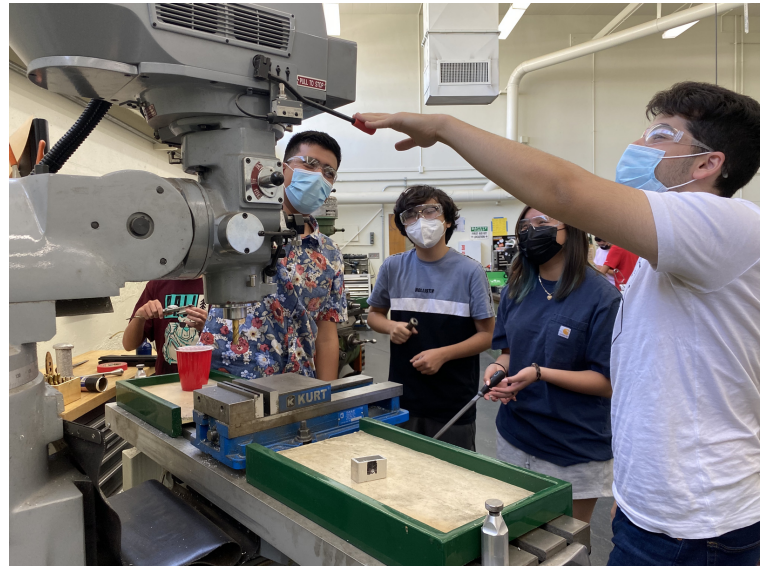
ROBODOX SOCIAL



Before everyone finally went back to in-person schooling after a full year of distance learning, some of the Robodox decided to come together and meet a few old and new faces at Menchie's near GHCHS. Nearly one and a half years had passed since we met in person, meaning there were now two years of new teammates who had not worked in the workshop. Everyone had a lot of fun chatting while enjoying their frozen yogurt. Unfamiliar faces were introduced, along with a coach and alum of the team. Overall, it was truly a refreshing and comfortable experience for everyone as we finally saw each other once again, to further catch up and share our thoughts and excitements of the upcoming year.

ROOKIE INTEGRATION

After a year of online learning, the Robodox veterans from different divisions came back and prepared their presentations and activities for this year's rookies for their integrations. These divisions include VEX, fabrication, CAD, programming, and E&P. The rookies split up into two groups. Division leads would teach the rookies about their respective division and try to recruit the rookies who showed the most interest. At the end of the 5 weeks the rookies would officially be Here's the reflections of a few of them after their rookie integration!



WHAT WAS YOUR FIRST IMPRESSION OF THE 'DOX?

William: Dox is a very professional, collaborative, group of people. They're all willing to help each other improve.

Angel: My first impression was that everyone was dedicated to their work and everyone was knowledgeable of their respective division.

Bee: I found everyone a little intimidating, after all, I'm a freshman and rookie. However, I soon saw that everyone wasn't just "a Robodox member", it was a unifying trait, but they all really cared about each other and had fun.

WHAT WAS YOUR ROOKIE INTEGRATION EXPERIENCE LIKE?

William: It was a very enjoyable experience. The greatest part about rookie integration had to be meeting the people from their respective divisions. It was great learning what division had to do to make the robot successful and how they overlap with each other to create a phenomenal product.

Angel: Rookie integration was quite insightful because it was expanded through different divisions from VEX, CAD, Fabrication, EnP, Programming, and Assembly.

Bee: Everything was new, so it was exciting, but I also didn't really feel left behind, and everyone was very accepting and welcoming (almost too much), like, "join our division, we'll give you candy."



ROOKIE INTEGRATION

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AND WHAT DIVISION DID YOU END UP PICKING IN THE END? WHY DID YOU CHOOSE THAT DIVISION?

William: I picked electronics and pneumatics because I really loved the environment. All the stuff in E&P was new to me so I was excited for a new challenge and opportunity to learn.

Angel: I chose CAD because I liked how we worked with SolidWorks. Hopefully, I learn more things for CAD as I stay in my new division.

Bee: In the end I chose Fabrication because I had thought I would enjoy something hands-on, and the idea of actually building parts was appealing to me.

NOW THAT YOU ARE OFFICIALLY IN YOUR DIVISIONS, WHAT IS YOUR IMPRESSION OF THE TEAM NOW?

William: Everyone has their own unique set of skills that allows the team to be successful and enjoyable. Everyday there is something to learn that can improve the robot and team dynamic.

Angel: Personally, I've seen how each and every one of the members from each division has taken initiative to strive for a productive off-season preparation. With the different practices that our veterans and leaders have implemented upon us, I have realized how much time and dedication that this team puts in to achieve its success.

Bee: I've found that everyone really knows how to work in their divisions, and together with other divisions. They're somehow able to balance their silliness with all their work, and it creates such a light workplace environment that you always look forward to coming.



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WHITE COAT CEREMONY



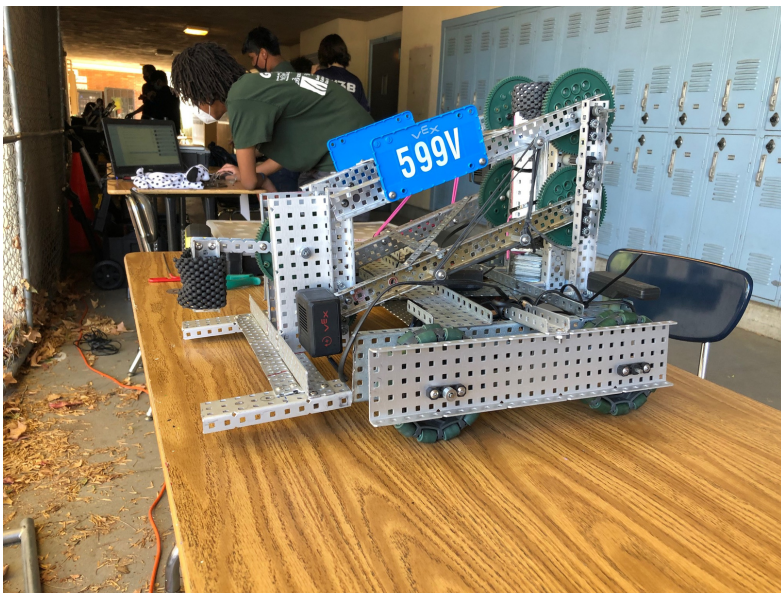
Over the past few years, the Robodox white coat ceremony has been a momentous occasion that has stuck the memories of each and every member, rookies and veterans alike. Last October 7, 2021, the Robodox had its official white coat ceremony for the rookies of 2021-2022. Through hard work and determination, our mentors and veterans have collaborated to ensure a fruitful rookie integration in a span of six weeks. The rookie integration has been expanded towards opening the scope of knowledge of our rookies, from VEX, CAD (computer-aided design), fabrication/assembly, E&P, and programming.



Considering the personal preferences of each rookie, they were further integrated into their new divisions. Despite the COVID-19 restraints, the parents and mentors were successfully able to attend the ceremony via Zoom, which contributed to the camaraderie that each person on the team experienced during this night. We started the ceremony by introducing parents to the basic divisions of our team and gave an overview of the build season and our goals in this team. Each rookie was called up by the division leads for their new division. Overall, we had a successful white coat ceremony and we can't wait to watch our rookies expand their skills as we all prepare for the future build season in the spring!

VRC - VEX CLASH OF THE CANYONS

Our VEX teams, 599V and 599W competed in their FIRST competition of the season on October 4th! For some rookies and second-year rookies, VEX Clash of Canyons was their first competition ever. Before the competition, both our teams tested their motors, wiring, and drive to ensure that they showed their best.



Overall, both teams did incredibly well. 599V ranked 14th place and 599W ranked 16th place. There were many challenges that the teams had to overcome along the way from broken motors to loose wiring. For instance 599V had to work through two broken motors! They borrowed one motor from the generous team, 20Z, and had to fix the other with a lot of tape, rubberbands, and determination.

FRC - TIDAL TUMBLE

The first offseason competition of 2021 that our team attended was Tidal Tumble hosted by Ventura counties High Tide on October 16. In the weeks leading up to Tidal Tumble, our team went through the long process of preparation. Every division played its part in ensuring the robot was up to par in hopes of taking home a trophy. Fabrication had a long list of things that needed checking, including the improvement of the robot's ball intake system, repairing the climb and hang system, as well as the construction of the robot's bumpers. The CAD division had finished the design of the robot a long time back which meant they had perfected everything they would need to do. Our team's programmers made a lot of improvements to the previous code by troubleshooting and fixing errors, they made an autonomous program for the robot, and also created command groups which let people run several commands with a single button press.



The people in the electronics and pneumatics division made sure that the wiring of the robot was functional by conducting various wire checks in order to try and ensure that nothing would have to be switched out in the middle of the competition as well as packing spare electrical components and batteries just in case. We also had to pack for the competition including the pits, trailer, and everything else that we may have needed. All in all, there was so much preparation that the team had to undergo in order to do as well as we possibly could and the fact that we did it in such little time was really quite amazing.

VRC - VEX LAVERNE

VEX had their second competition of the season, VEX La Verne 2021, on the 23rd of October. Both teams worked industriously to prepare for the competition. Staying after school to work on their robot and coming to class during breaks. After thorough testing and preparation, our teams were ready for competition! Throughout the competition both teams persevered through many build challenges and made it to the quarter finals. VEX 599V ranked 26th place and VEX 599W ranked 24th place. Because of their diligence and perseverance, 599V won the Judge's Award!



FRC - BEACH BLITZ

The next offseason competition our team attended was Beach Blitz, hosted by team 4276 and the Orange County Robotics Alliance. This competition, the team was determined to excel and thrive by further developing our robot and fixing past mistakes we made. We gained a lot of experience during Tidal Tumble and wanted to apply what we learned for our next competition: Beach Blitz. Each division worked on fixing parts that . Programming worked hard on testing past code and developing new code to get each subsystem of the robot working, from the drive to the intake to the shooter to the climb. Programming also conducted tests on the robot's controls and fixed the climb so that the robot can pull itself onto and traverse across the bar.



Fabrication conducted fixes on the robot such as repairing the intake and building a stronger set of bumpers. As for electronics, wire management was the main goal, whilst making sure the control system was up to date. On the other hand, CAD was focused on practicing sub-system sketches and drawings based on the 2020 FRC game as part of their off-season preparation. Lastly, our drive team practiced strategizing, organizing information on other team's robots, and driving the robot.

OFF-SEASON PREPARATION

After Beach Blitz, the Robodex have been comprehensively establishing their off-season preparations and have picked up the pace towards a productive future build season. Each division has planned their training and respective preparations for the spring semester as rookies are being integrated into their respective divisions.



For instance, CAD veterans are collaborating with the rookies to pass on the fundamental skills that they need to learn, creating things from crayola CADs, to prototypes of different subsystems for the robot. In Fabrication, the rookies have also worked with the veterans to further expand their skills with the different machines that they will use for the future build season such as using the mill, lathe, and the drill press. For Electronics and Pneumatics, the veterans worked with the rookies to create a model for the CAD division for the belly pan, in reference for the future design of the robot, for the team's efficiency in the electronic parts.



In addition, EnP has also worked with Phoebe, the former robot, by fixing the talon issues and have prepared both robots for this year's Holiday Parade. Lastly, for Programming, the rookies and veterans have worked together in synergy, learning from the alumni and their mentors on the fundamentals of coding for a robot, further expanding their knowledge by practicing on the previous robots such as Annie (2019) to Phoebe (2020), by learning how to revitalize the code of these builds.



“ AFTER A FULL SEMESTER OF PREPARATION AND INTEGRATION, WARMING UP FOR THE FUTURE BUILD SEASON OF THIS YEAR, EVERYONE IN EVERY DIVISION IS ECSTATIC TO START BUILDING OUR FIRST ROBOT AFTER A YEAR OF ONLINE LEARNING.

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