OCTOBER 19 2017 TECHHOUNDS NEWSLETTER



INDY RAGE

On Saturday, October 7th, TechHOUNDS traveled to Perry Meridian High School to compete in Indy RAGE, an all-girls robotics competition. This event was created in 2016 to empower girls to increase participation in STEAM. TechHOUNDS wanted to make sure that any female member could try pit crew or drive team if they wanted to. To do so, TechHOUNDS let female members trade off the driver positions during the qualification matches. For most girls, it was the first time they got to touch the controls. This strategy definitely did not put us in the best position for eliminations; TechHOUNDS actually placed dead last. However, despite the odds being stacked against us, TechHOUNDS were selected to be on the second seed alliance with team 1529 Cybercards, 3940 Cybertooth, and rookie team 6956 Shamrockbotics. Since there was an odd number of alliances, the eliminations were based on points rather than wins or loses. Each of the five alliances would play two matches, the two alliances with the most points would go to the finals. TechHOUNDS driver Allison Earnhardt and operator Megan Singer kicked off eliminations with an incredible score of 190 to our opponents' 95. With only one match to prove ourselves, our alliance captain team 1529 encountered an extreme power problem and had to sit out the second match. Down an alliance captain, TechHOUNDS, 3940, and 6956 turned three rotors and managed one climb. Although our alliance played two incredible matches, we did not qualify for eliminations. This placed our alliance third overall. The event was an amazing way for any female interested in robotics to get a chance to participate in the competition aspect of FIRST.

THE NUTS AND BOLTS



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NOT JUST ROBOTICS

Carmel High School TechHOUNDS FRC 868 is a team that builds a robot, but TechHOUNDS is not just robotics. TechHOUNDS is a FIRST Robotics team, competing with teams all around the world. FIRST is an acronym, meaning For Inspiration and Recognition of Science and Technology, and as a FIRST team TechHOUNDS' goal is to engage students and prepare them for their future education as well as future jobs. In order to meet our goals we provide a safe environment for students to gain experience in Science, Technology, Engineering, Art, and Mathematics (STEAM). TechHOUNDS strive to engage diverse communities in order to truly expand the FIRST community. There are many different ways to participate in TechHOUNDS and it all starts by choosing a division.

To best promote a real life engineering experience and accommodate our game challenges, our team is split into six divisions where students get the opportunity to excel in a certain field. Our primary and most popular division is Robot Operations (Robot-Ops), which designs and constructs the actual robot. The Electrical division aids the design process as well as wire the robot. Programming makes the robot move, coding with Java and multiple other languages. Construction builds the practice field in order to test the robot before competitions. Information Technology (IT) codes



the scouting system as well as the website, techhounds.com. Finally, Public Relations (PR) handles all of the media, outreach, and sponsor relations. To know more about all of the divisions visit page three. In each division our students have the opportunity to work with multiple mentors. Mentors can be teachers, parents, or professionals from the community. Mentors are an absolutely incredible part of our team who take time out of their busy schedules because they all believe that this program is beneficial to student's lives and important for their future. We would like to thank all of our mentors for their contributions to our team.

The benefits of this program can be endless; it really just depends on how the student chooses to engage themselves. Team Alumni and current mentor Mr. Alex Ryker explains how this team impacted his career. "Participating in TechHOUNDS has allowed me to accomplish things I never thought possible. It gave me the skills I needed to become a published author in computer science and start my own engineering company. I came back as a mentor to help give back to the program that gave so much to me," Ryker said.

The best way to express interest in becoming a bigger part of the team is to talk to a Mentor or Student Lead. Student Leads are nominated and elected by the students at the end of every school year. Those elected then go through a training process starting the week they are elected. All leads are there to provide support for all students, whether that is teaching new skills, organizing projects, or becoming a role model. TechHOUNDS is a prime example of the famous quote "you take what you leave behind." TechHOUNDS members have the opportunity to commit themselves to gain valuable skills like time management, communication, leadership, and more. TechHOUNDS is not just robotics, it is a gateway for students to invent their future. Please contact techhounds868@gmail.com with any questions.

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DIVISION INTRODUCTIONS

ROBOTOPERATIONS

- Deals with the construction of the robot -

"Robot Ops has been delving into our minibot game -"Ping Pong Problem"- while learning basic robotics through the game and student led lessons. We've also tool trained and are learning how to use CAD." -Sam Bruns

ELECTRICAL

- Wires the robot and has a "shocking" time -

"Electrical has gone through safety training, learned what components go onto the robot, and how to connect the wires to make the components function. We have also been building a testbed to learn how to lay the components out neatly as well as fixing older robots." -Megan Singer

CONSTRUCTION

- Manages the practice field-

"In construction we have started rethinking the pit, designing the electrical and robot cart. We have started the process of painting the trailer. We have also started cleaning the back of Bonwit's (our team coach) lab so that we could permanently set up a practice field." -Marcus Ford

PUBLIC RELATIONS

- Makes everything look awesome-

"Public Relations has had a great start to our year, many of our members have begun learning essential software. We had produced our first newsletter, which you are reading right now! I can't wait to see what PR comes up with next." -Bryce Castle

INFORMATION TECHNOLOGIES

- Codes the website and scouting system -

"IT has finished basic training for the rookies, teaching html, css, JavaScript, and Github use. We now plan on having the rookies develop their own mini creative projects to practice newly learned coding skills while veteran members finish the daily sign-in system."

-Austin Hartman



"Hopefully we'll get to start testing basic code on the Vex bots next time, Hammerhead's demo code should be ready to test, and hopefully we'll have some functional swerve code soon." -Caleb Smith

SAFETY GOGGLES

We work with tools that can blind you if not used correctly. At competitions, they have some goggles; but they are limited, so don't forget to grab some.

GOOD ATTITUDE/SMILE

We want the team to be happy, smiling, and cheering for TechHOUNDS (even if that means to have 6 cups of black coffee in the morning of the competition).

PHONE

It's a competition! You want to take photos, make memories, and send pictures to PR to use in the newsletters.

PHONE CHARGER

You're phone does NOT have an unlimited battery! Parents want to know how you are and you want to keep track of the team and their alliance on Spyder or Blue Aliance app.

HELPFUL APPS

Apps such as Spyder and Blue Alliance will send out updates on the team throughout competitions. To learn more about *FIRST* go to www.firstinspires.org .

WATER BOTTLE

Hydration is key! Make sure your bottle has your name on it. Oh, make sure you actually fill the water bottle with water.

NAME TAG

People want to know your name. Don't be the person who says, "Hey guy". Its helpful for TechHOUNDS to know everyone's name for awesome teamwork.

VALUABLES

There are concession stands at the competitions, so if you bring money, make sure to keep it safe. Don't ever leave anything unattended.

SNACKS

In case you get hungry always remember a snack. Recommendations are salted cashews, granola bars, apples, and chocolate!

TECHHOUNDS APPAREL

Support the team! For competitions, you may want to have two items just in case of those messy times. You bought the apparel, so just wear it! But don't forget to wash it for day two!

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