



ROBOTICS DESIGN AND INNOVATION CLASS

Next year Carmel High School will be implementing a new robotics class. TechHOUNDS Lead Coach and Manufacturing teacher Mr. Zac Bonewit started the process a few years ago, but has just gotten the curriculum and requirements approved for the 2018-19 school year. Students who wish to take the Robotics design and innovation class must meet one of three prerequisite options. Students are able to take the robotics class if they have had two years of TechHOUNDS experience or if they've taken two Project Lead the Way classes. If students do not meet those requirements they could request a teacher recommendation that would be reviewed and either accepted or denied.

In the class students will learn about the processes of building a robot. First semester students will learn the basics of robotics using VEX and some FRC components. Second semester students will get the chance to work with a TechHOUNDS robot. This class is an amazing opportunity for students who do not have the time to participate in TechHOUNDS out of school hours, and for students just looking to advance their engineering knowledge.

As there is only one robotics class students must apply to be able to take the class. This includes filling out a form and explaining what your goals for the class are. Applications can be found at <http://www1.ccs.k12.in.us/chs/industrial-technology> and must be turned in by February 1st.

THE NUTS AND BOLTS

UPCOMING EVENTS

February 20:

Stop Build Day

March 24 & 25:

Plainfield District

March 30 & 31:

Tippecanoe District

April 13 & 14:

State Championship

CONTENTS

- 1 New Robotics Class
- 2 IndianaFIRST Filter Contest
- 3 Meet Our Team
- 4 Division Updates
- 5 SPONSORS

CONTACT US @

techhounds868@gmail.com
or visit techhounds.com

AND FOLLOW US

@frc868

FOR TWITTER:

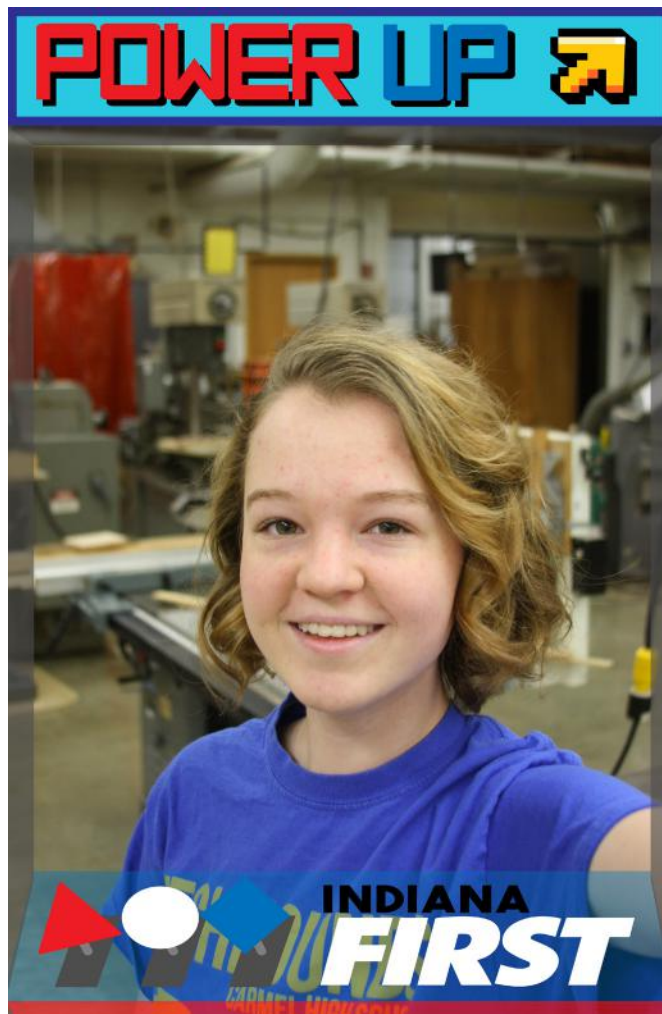
@techhounds868

INDIANAFIRST FILTER CONTEST

Each year FIRST and IndianaFIRST find creative ways to publicize their programs. This year IndianaFIRST held a Snapchat Filter Contest. Popular social media apps like Instagram and Snapchat are currently one of the most efficient ways to spread ideas. IndianaFIRST sent out a challenge to all Indiana FRC teams. The idea was simple, design a Snapchat filter revolving around FIRST and this year's theme, POWER UP. Our Public Relations division was quick to participate. After designing multiple ideas we submitted our most popular design. Weeks later we heard back from IndianaFIRST PR & Marketing Committee Chair, letting us know the filter to the right was chosen as the contest winner. Our design will be featured at all Indiana Competitions open to all who attend. The example of our submitted design can be seen to the right.

HOW TO USE SNAP FILTERS

1. DOWNLOAD SNAPCHAT & SET UP ACCOUNT
2. TAKE PICTURE (WITH LOCATION ON)
3. SWIPE LEFT UNTIL YOU FIND THE FILTER
4. POST ON YOUR STORY OR THE COMMUNITY STORY



PRESEASON PHOTOS HIGHLIGHTS



INDY RAGE OFF SEASON COMPETITION



FESTIVAL OF MACHINES

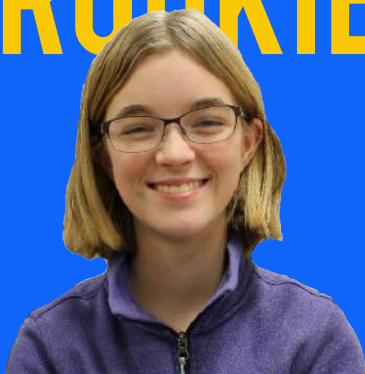


TECHHOUNDS LATENIGHTER

MEET OUR TEAM

A WEEKLY SHOWCASE OF THE MEMBERS & MENTORS WHO MAKE OUR TEAM TICK

ROOKIE



MIRANDA FINNEY

Why did you join?

I'm interested in STEM and I thought the club looked interesting.

What have you liked about the team so far?

It has been fun. I haven't done a lot, but I assume it's going to get a lot more intense when it get closer to the competitions.

How did you hear about TechHOUNDS?

I went to a Women in Technology Workshop when I was in Middle School. I don't remember if that was the first time I heard about TechHOUNDS, but I had fun.

What do you do on the team and what does that entail?

I've been here for 11 years and my first experience with TechHOUNDS. I am already blown away to say the least with the amount of work that the kids are doing, we clearly have a student run program. It was really impressive to see the amount of work that these young professionals are able to accomplish and the amount of experience they are able to get through the program. It was really eye-opening to see all the work.

What do you do as a profession?

I do a lot of different things. I am a teacher at the high school; I teach Digital Electronics and Principles of Engineering, which is part of our PLTW engineering classes. I also coach football, and I am the energy manager for the school district.

MENTOR



MR. SWARTZENDRUBER

4TH YEAR



NATHAN ROBB

What has TechHOUNDS taught you?

I have learned a lot about wiring, engineering, and problem solving which are big parts of any robotics team. Through the Chairman's Award, I learned a lot about Public Speaking and being more confident about myself and my abilities and getting out there.

What's your favorite part of TechHOUNDS?

The people. I've made a lot of good friends on the team and it's nice to know people you can rely on.

What is one thing you wish you knew as a rookie?

I wish I had put more effort into learning things on my own, outside of meetings and put myself into a position to work with leads instead of waiting for stuff to come to me.

DIVISION UPDATES



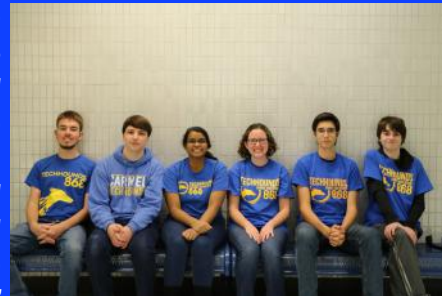
ROBOT OPERATIONS

"We are moving forward with our designs after our modifications to the original plan due to limitations we found in testing. We will be manufacturing next week."

-Derek Fronck

"We've been programming LEDs so that the sensors will change their state. We have also been CADing as much of the electrical board as possible and trying to put all of the components on it."

-Megan Singer



ELECTRICAL



CONSTRUCTION

"Construction finished the field a week ahead of schedule. We have started to work on the pit structure as well as the electrical, battery, and robot carts."

-Marcus Ford

"So far this week PR has worked on locker signs. We also have started working on designs for apparel. Some of our members are putting some ideas down on the computer and we will have some design choices for spirit wear."

-Bryce Castle



PUBLIC RELATIONS



INFORMATION TECHNOLOGIES

"We've made progress on the scouting system, and we are going to be starting on the back end and actual strategy part next. The website has been going great; it has been reviewed by some mentors and has been progressing."

-Austin Hartman

"We've been working with the prototype robot with some autoshifting and auton driving code. We've also been playing around with motion profiling code and some vision code."

-Caleb Smith



PROGRAMMING

SIGNATURE

\$6000+



United Technologies



Carmel High School
Rolls-Royce®

DIAMOND

\$4000+

• APTIV •

GOLD

\$1000+



JONES ROBB^{PLLC}
INTELLECTUAL PROPERTY LAW

Duke REALTY

LENTZ
INDEPENDENT CONSULTING

SILVER

\$500+

TechLite
Flexware
Weihe Engineers
Bifrost Engineering
Delk McNally LLC
Bill Estes

Performance Services
Lacy Foundation
Dirk Bowman
McAlisters Deli
Redali Consulting
KSM Business Services, Inc.

BRONZE

UP TO \$500

IQE
Bizmetriz LLC
Cobalt Aquatics
Lomada Services
Reliable Adjusting
Tiek Dental Studio
Carmel Comprehensive Dental Care

Sub Zero
DigitalOcean
Women & Hi Tech
Drewry Simmons Vornehm, LLP
Franklin Window & Door, Inc.
Busy Bee Headbands
Platit Korea Co. Ltd.
L&J Realtee LLC
AndyMark
Golars

Game ON ESPORTS
Smile Arts Dental
Cheetah Digital
Greek's Pizza
Andy Baker
Hoess Brothers
City Barbeque
Stribling Media
Healthcare Triage
Carmel United Methodist Church

THANK YOU TO ALL OUR 2017-2018 SPONSORS