



**THE NUTS AND BOLTS**  
**TechHOUNDS Newsletter**

# TECHHOUNDS OUTREACH

Carmel High School’s TechHOUNDS Robotics Team has a strong commitment to furthering the development of the FIRST (For Inspiration and Recognition of Science and Technology) Robotics program in Carmel and the central Indiana community. Through the years TechHOUNDS has had multiple different outreach events including Women in Technology, Hound Found, Helping Hounds, and many others. After working on furthering our outreach, TechHOUNDS adopted the trademark “the future is now.” The TechHOUNDS approach to outreach is divided into three steps. The first step is to engage the community. Bringing awareness to a cause is the only way to expand that cause. The TechHOUNDS cause is expanding student interests in STEM (Science, Technology, Engineering, and Mathematics) fields. TechHOUNDS engages the community through social media, demos, and other outreach events. Step two is inspiring future generations. TechHOUNDS believe that continuing to further interests in the STEM field is essential for the future. We feel as though learning in a fun and creative environment will be more effective than teaching STEM subjects in a regular classroom setting.

*continues on page 2*

## UPCOMING EVENTS FEBRUARY 27: STOP BUILD DAY

<b>CONTENTS:</b>	
<b>TECHHOUNDS OUTREACH</b>	<b>1</b>
<b>TECHHOUNDS OUTREACH CONTINUED</b>	<b>2</b>
<b>DIVISION UPDATES</b>	<b>3</b>
<b>GET TO KNOW OUR TEAM</b>	<b>4</b>
<b>SPONSORS</b>	<b>5</b>

## PHOTOS OF THE WEEK



To inspire future generations the TechHOUNDS hold demonstrations, workshops, and other outreach events. Our student volunteers take time out of our scheduled team meetings to teach the younger kids about what we do. Ryan Cole volunteered at Our Lady Mount Carmel Elementary School. “As a mentor I go to OLMC and I oversee their FIRST Lego League team. They ask me for help on a lot of their ideas so I try to steer them in the right direction while allowing them to learn on their own,” Cole said. Mentoring not only helps the kids but also teaches the mentors valuable life skills. “I really enjoyed my time



Team Coach Zachary Bonewit

in TechHOUNDS and I really wanted to give back to the kids. Helping them enjoy the same things I’ve enjoyed... has taught me a lot about working with kids. It’s not something I have really done before. I’ve gotten a lot better at just



Construction lead Allison Cunningham and Outreach lead Linnea Schultz

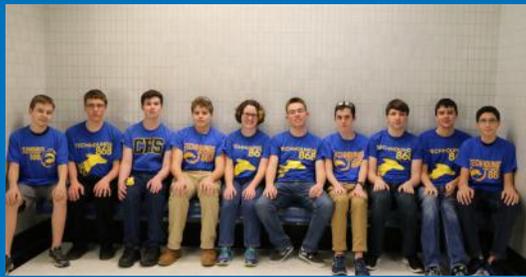
talking with and teaching the kids,” Cole said. The third step of our outreach approach is to invent the future. As individuals and as a team we all have plans for the future. TechHOUNDS is a student-run, student-lead team and

our mentor protocol is generally hands-off. TechHOUNDS students get the chance to further valuable skills required for success in the future, including leadership, organization, and time management. TechHOUNDS outreach has been 100% student-founded and student-run. We hope to continue with all outreach projects and goals. We encourage anyone who is interested in learning more about our outreach initiatives to visit our website.

# DIVISION UPDATES



**CONSTRUCTION** “We have all the materials on the parts list ordered now, so everyone has started working on the pit. The battery box group has been working very diligently. We are building the airship now, which is a part of the field that wasn’t included in the team version.”



**ELECTRICAL** “We have done more safety training and we’ve helped Robot-Ops work a little bit more on their design. We’ve helped programming with their cameras and LEDs. We have a couple people working on an expansion board for a small Arduino so that it is easier to use.”



**INFORMATION TECHNOLOGY** “We are updating the website and making sure it all looks good. We’re making good headway on the scouting system. We haven’t started with the functionality but it looks pretty good.”



**PROGRAMMING** “We’ve worked mostly with the LIDAR; we have had some issues communicating with it, so we are going to build a small circuit. We’re working with Electrical to help with a few of their projects and we’ve worked on the Pixicam, which is what we are going to use for vision tracking. We found that infrared has been reliable and consistent.”



**PUBLIC RELATIONS** “This week has been extremely productive. We finished all mentor nametags, our weekly video, all of our spiritwear, and the locker signs which we will be hanging up early next week. We corrected some nametags and printed them. We also finished the locker signs and will be putting them up soon next week.”



**ROBOT OPS** “We prototyped this week while also doing a design log and working on the CAD model. We have a semi-finished shooter, feeder, and other mechanisms we want to incorporate.”

# GET TO KNOW OUR TEAM

## ROOKIE CORNER



### **PETER FERCHMIN-ROWE**

#### **Why did you join?**

This world of technology is always expanding, and I want to be able to learn and work with it in the future because I love engineering.

#### **What are your aspirations for the team?**

Since I'm new, just to help out with as much as I possibly can, because I want to learn as well as help the team.

#### **What have you liked about the team so far?**

The people are really great and very accepting. I'm jumping into a whole new world of people and thoughts and beliefs and ideas; I'm coming from the school world immediately to the robot world, which is fantastic, and everyone is super welcoming and encouraging.

#### **How did you hear about TechHOUNDS?**

I heard it from a friend who just mentioned it; he was in high school ahead of me, a senior at the time. He told me that if I want to continue with engineering, that I should be a part of this club, so I got really excited to be a part of it.

## MENTOR CORNER



### **MR. FRONEK**

#### **What do you do?**

I work with the Construction group right now. The first thing we did was build the pit and field. Now we are working on rebuilding the battery box.

#### **Why did you become a mentor?**

My son Derek was a freshman last year and he joined the team. I really liked seeing how the kids and the team bonded together. I had a lot of fun listening to what each division did and I figured I could help out most with Construction. It sounded like a great experience to be with the kids and teach.

#### **How long have you been a mentor?**

This is my first year.

#### **What is your goal as a mentor?**

I just hope to be able to see the kids grow, learn how to do different projects, and see them expand their skill sets with what they are working on.



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