

# Munster Horsepower

Team 3147

Volume 1, Issue 2

April 2018

---

---

## SEASON UPDATE: OUR PROGRESS

---

### We have powered up!

After a challenging performance at the Indiana District St. Joseph Event, the team took some long strides in the two weeks to come up to the Indiana District Tippecanoe Event. In this time period, we stabilized the robot, increased speed, and mastered driving skills such as dropping cubes on the switch efficiently and loading 9 cubes into the vault within 40 seconds. With this new-found efficiency, the team and robot showed our great potential at the Indiana District Tippecanoe. Here, we went on to advance to semi-finals. After this competition, we secured our spot at state.

April 12th-14th, we were at the Indiana District Competition. At this competition, we did not rank so high, but we did show our growth when we demonstrated our new ability to preload a cube for autonomous. Despite our ranking, off the field, we showed tremendous growth, which was showcased when we received the judges award. We received this award for our community involvement, determination to help those who aren't as privileged, and developing our garden that incorporates our whole community.

---

## FIRST: ROBOTICS

### What is FIRST?

FIRST is the organization that makes this world-wide wonder of robotics possible. First is an organization that puts the needs of others, morals, and ethnics first. However, it is such a remarkable group that they have made countless students around the world say: Robotics first. First has created such a healthy competition and activity that it has taken over the lives and passion of students and adults alike. While this group runs the massive competition of robotics. They also lead the way in the development and hosting of other competitions such as Junior First Lego League (JFLL), First Lego League (FLL), and First Tech Challenge (FTC). With an FLL team at our own town's middle school, they hosted an event April 28th. Through events such as these, we have found a way to connect with our younger, Wilbur Wright Watts members. First makes all of this possible by creating a simple pathway for us to engage with our STEM partners and community around us. Thanks to First, we can use the means of sponsors and mentors to train our next generation of engineers, teachers, artists, and officials around us.

**FIRST creates LEADERS.**

# GALLERY

PHOTOS THIS MONTH



This is our Judges' Award, which we received for our garden and water conservation project. This award is given to a team that is unique and stands out either on or off the field. The FIRST Judge's award may be given to a team in order to recognize a team's unique efforts or performance which demonstrate the principles of FIRST.



This is the Lego Sumo event that was held at our local middle school. We helped with running the event and we demonstrated our 2014 and 2018 robots.



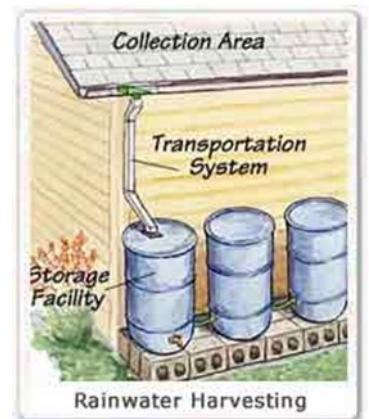
Here, we have most of the members who attended the Indiana State Championship. Also included is our team flag, Judges' Award, and our robot from this year.

# COMMUNITY OUTREACH

## Our Plan for the Future: Creating a Cultural and Agricultural Revolution

Northwest Indiana has been shown to be plagued by food deserts. In addition, according to the NWI Times, Northwest Indiana is named the 16<sup>th</sup> most polluted area in the nation, and NBC Chicago says 2 Northwest Indiana beaches are among the most polluted. This made our team realize we need to make a change. In order to solve our devastating issue of food deserts, we took it upon ourselves to find fresh food for those who were plagued from it. Our only way to do this was to grow the food ourselves. The solution was simple, we created a plan to use our school roof as a base for a garden. This was then approved by our school board. We have now moved on to a contract with Whole Foods where they support our garden, and we have found this beneficial for our own school because this has lead the way to the development of an agriculture and agribusiness class. This will greatly help our community, but we know this is not enough. Some people are starving while some are also suffering the health effects of pollution. After immense research, rainwater harvesting was the best solution to decrease pollution and to water our rooftop garden. Rainwater harvesting will prevent erosion, flooding, and water contamination in lakes, rivers, and streams. Therefore, the use of this system will help clean up our environment. Additionally, the EPA has shown 40% of household water consumption is

Plan: long rectangular planters filled with vegetables throughout roof, open top pipes around perimeter and throughout collect water with buckets on end to collect water with filtered top to reduce amount of impurities in water



### So Far, We Have...

- ⇒ Created the wooden planters
- ⇒ Planted seeds
- ⇒ Structured 5 Year Plan and Budget
- ⇒ Received a grant from the Munster Education Foundation
- ⇒ Started working with a local elementary school to create their own garden
- ⇒ Reached out to kids in other communities
- ⇒ Started including other classes, such as botany

FEEL FREE TO REACH OUT FOR MORE INFORMATION

## Our Officers

President: Zack Montes

Secretary: Serena Alvarez

Head of Engineering: George Babus

Head of Programming and Developing: Hamzah Rafiq

Safety Officer: Joe Roe

## OUR SPONSORS

We greatly value our sponsors seeing as they help us financially, and we value them as our inspiration as well. To recognize our immense gratitude, we would like to thank them by identifying them on the list below:

The Hammond Optimist Club  
 LEAR Corp.  
 Allstate Insurance  
 The Weller Family  
 Five Guys Burgers and Fries  
 Tower International  
 Boeing  
 Chipotle  
 Creative Coffees Roastery  
 Illinois Tool Works  
 Legacy Foundation  
 Munster Booster Club  
 Munster Education Foundation  
 Munster High School STEAM Team  
 National Council of Teachers of Mathematics  
 Potbelly's  
 Sarkey's Florist  
 VanDrunen Ford

# April 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6 Visit Eads Elementary school for Garden	7
8	9	10	11	12 Indiana District State Event	13 Indiana District State Event	14 Indiana District State Event
15	16 Off-season begins	17	18	19	20	21
22	23	24	25 World Championship	26 World Championship	27 World Championship	28 World Championship Lego Sumo Event
29	30					

Contact Us

Organization name:  
Munster Horsepower

Address:  
8808 Columbia Avenue  
Munster, IN 46321

Phone/Fax/E-mail:  
Coach Email:  
imgovert@munster.us

Visit us at: [robotics.munster.us](http://robotics.munster.us)