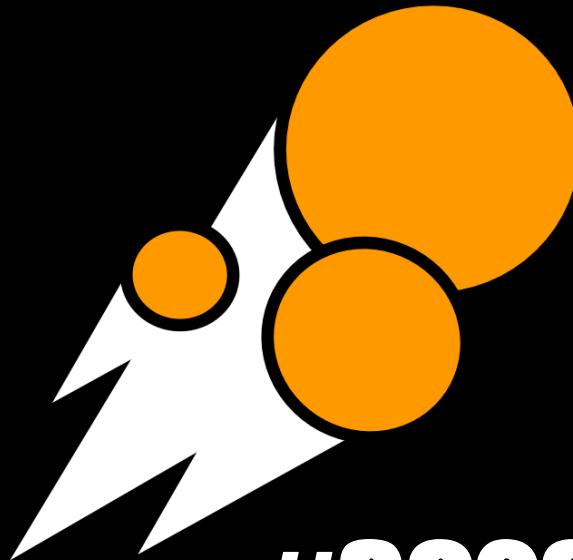
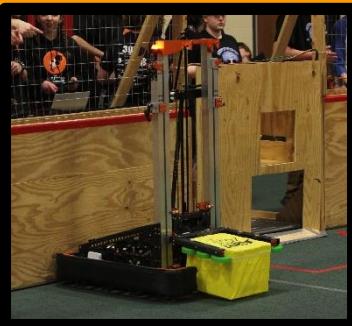


2018



#3928

Team Neutrino

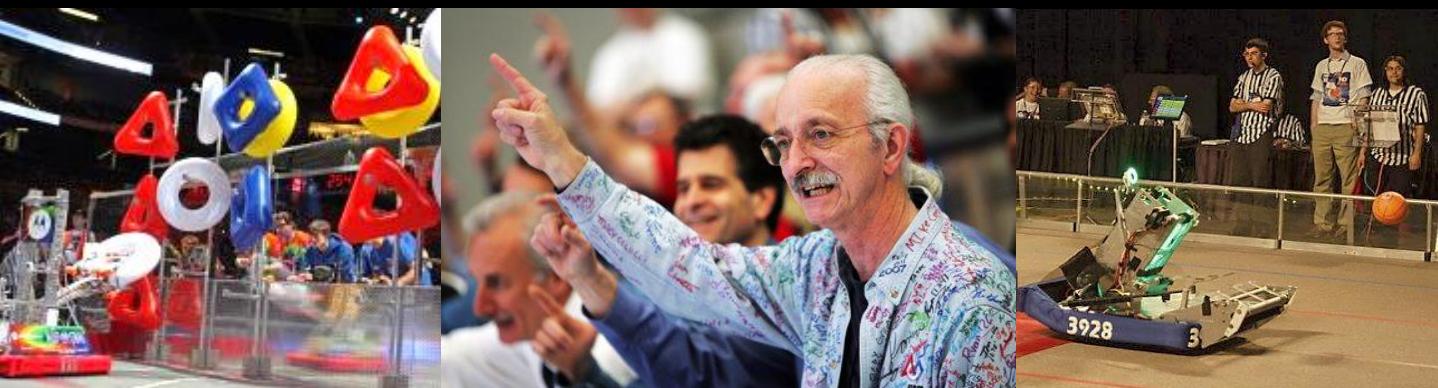


What's FIRST?

FIRST® is a not-for-profit organization that designs fun, motivational programs to help young people aged 16-18 discover and develop a passion for Science, Technology, Engineering, and Math through challenging robotics competitions.

The Mission of FIRST

to inspire youth to be the science and technology leaders of tomorrow by engaging them in exciting Mentor-based programs that build their skills, inspire innovation, and foster well rounded life capabilities including self confidence.





The Challenge

Deliver to the Vault:

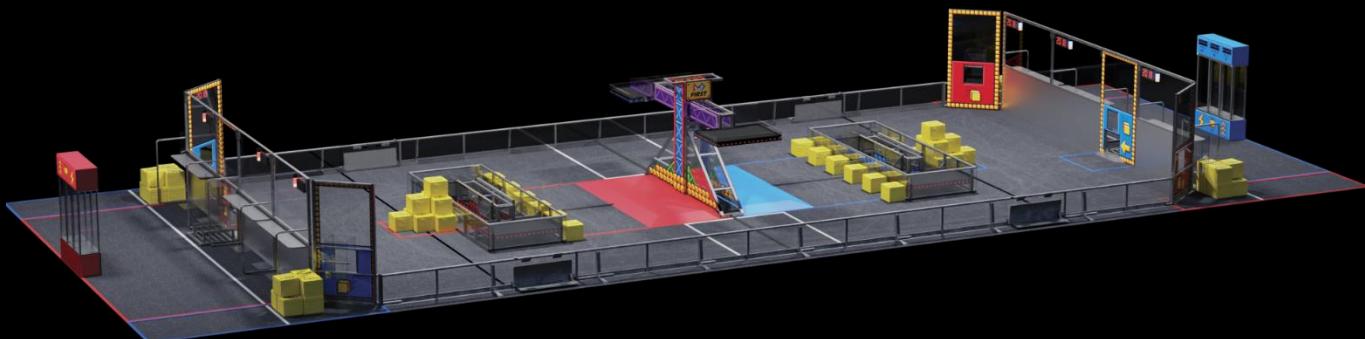
- Robots collect Power Cubes (milk crates) and deliver them to a human player station to be stored in vault
- Vault contains power-ups that can be activated to give an alliance an advantage

Control the Scale and Switch:

- Robots deliver Power Cubes to the Scale and Switch to tip it in their alliance's favor

Fight the Boss:

- To fight the boss, robots have to climb the Scale and keep their bumpers 12 inches above the ground



2016 Team Picture

In 2016, Team Neutrino went to the Minnesota North Star regional and the Iowa regional! The team was a semifinalist at North Star and a quarterfinalist at Iowa. The team had the honor of winning the Judge's Award at the competition.



2017 Team Picture

In 2017, Team Neutrino went to the Minnesota North Star regional and the Iowa regional. The team was a quarterfinalists at Iowa and a semifinalist North Star. At North Star, Team Neutrino won the Chairman's award, sending the team to the world championships!



Watch out for
us at this year's
Seven Rivers
and Iowa
regionals!

2018 Team Picture



Meet the Team!



2018



Build Season

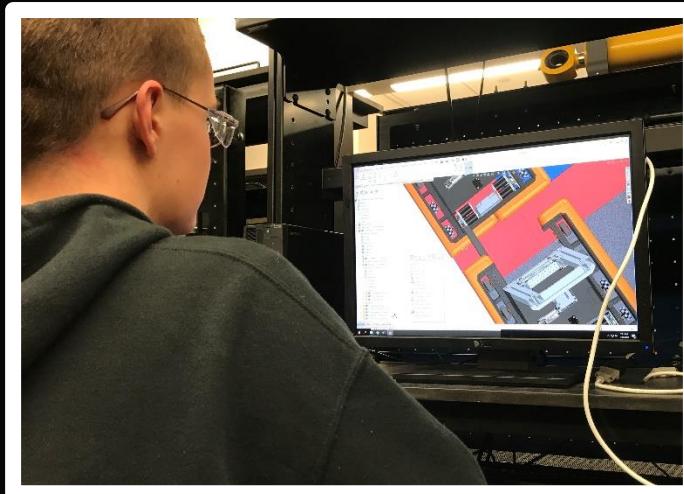
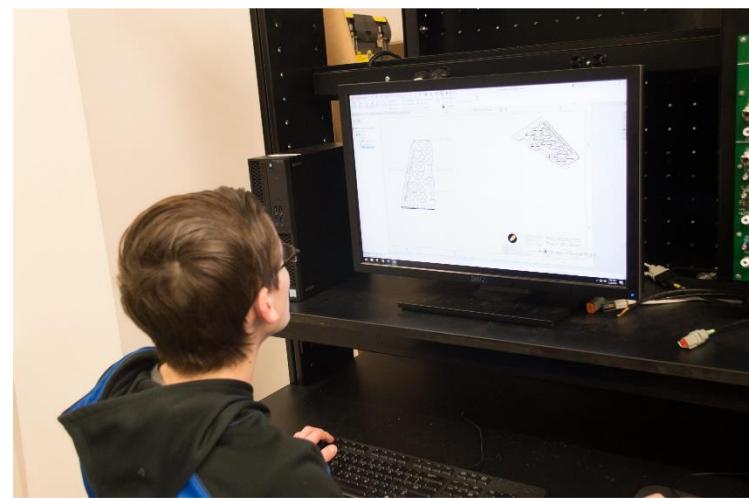
2018 Kickoff

FIRST
POWER
UP!



Kickoff marks the start of the 6 week build season. The team watched the live stream, read the rule book, and began planning for this year's game, FIRST POWER UP.





The team uses CAD to design the robot and send files to Quality for production

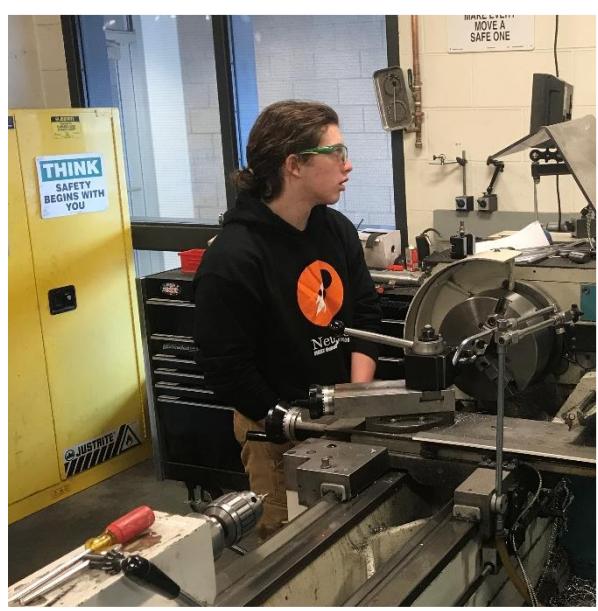


CAD

**The teams
test and
refines
ideas
through
prototyping
before
production**

Prototyping



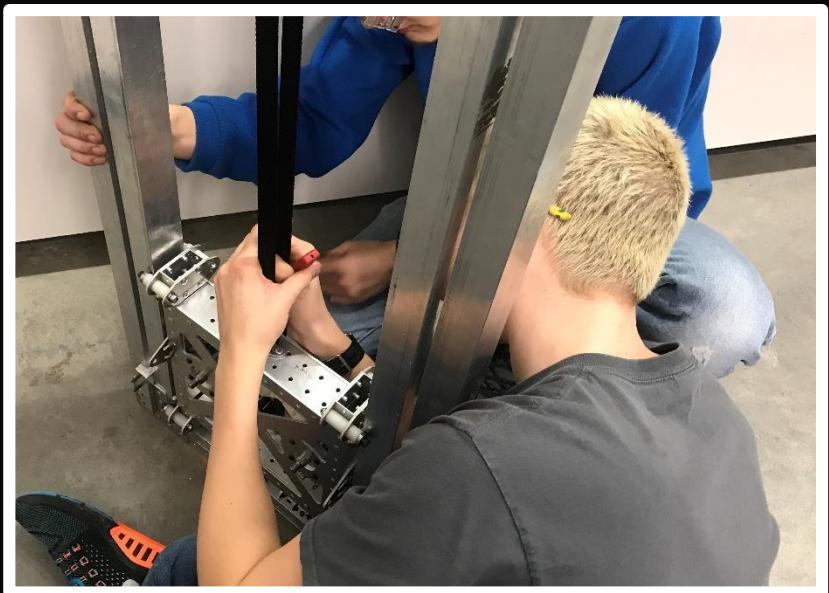
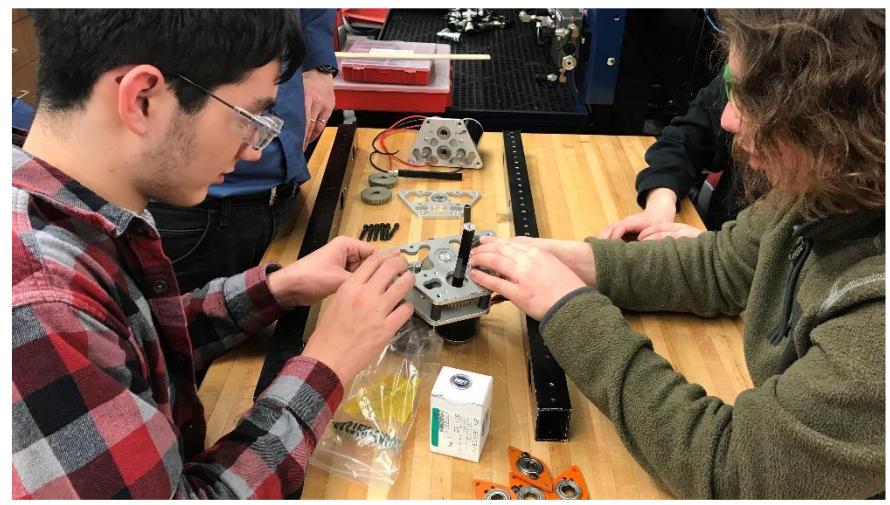


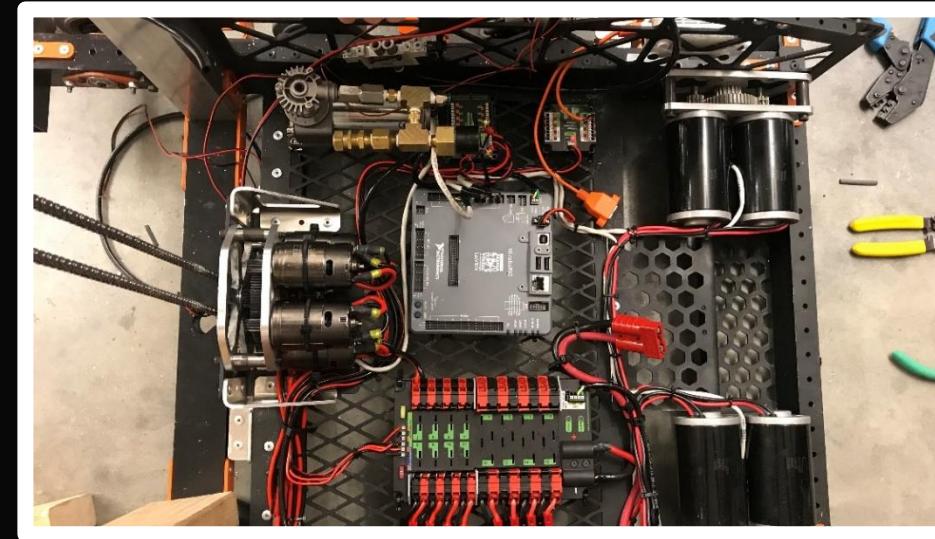
**The team
uses Boyd
Lab to
machine
parts for
the robot.**

Manufacturing

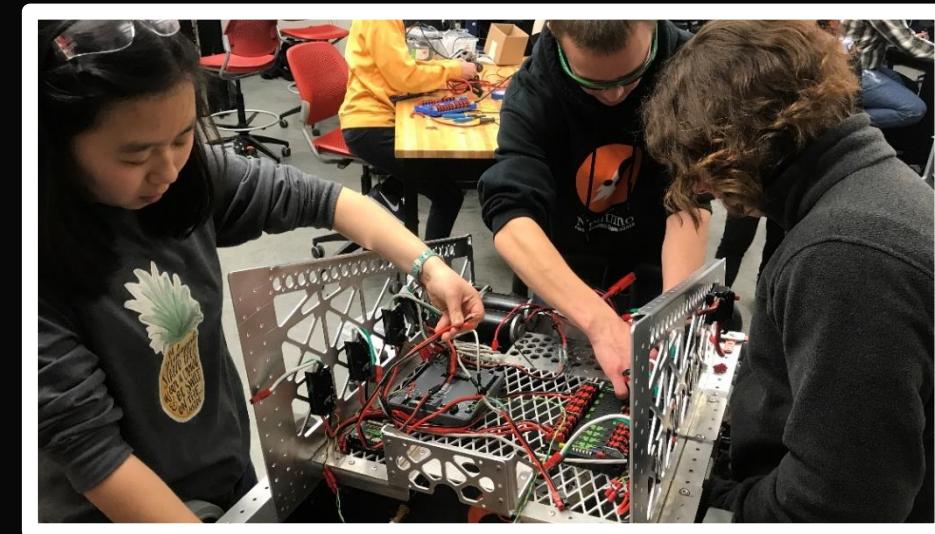
Robot Assembly

The team assembles the robot to be wired and programmed





The team puts together the robot's electrical system, allowing it to be moved and programmed



Electrical

**The team
assembles
the robot to
be wired and
programmed**



Programming

Robot Reveal

Near the end of our 6 week build season, we revealed our robot to the public.



etc., national and global levels. It also aims to improve quality of life for rural communities. Key objectives is to serve stakeholders through adult learning, mission-oriented research and extension/professional services. The research and extension programs focus on air quality issues related to animal production, animal behavior and welfare, animal housing and environmental control, and animal manure/nutrient management.

Research Areas

- Manure management and biomass production
- Animal heat and cold stress and biosecurity
- Swine and poultry production, behavior, air emissions and energy

Odor/gaseous control, detection and mitigation



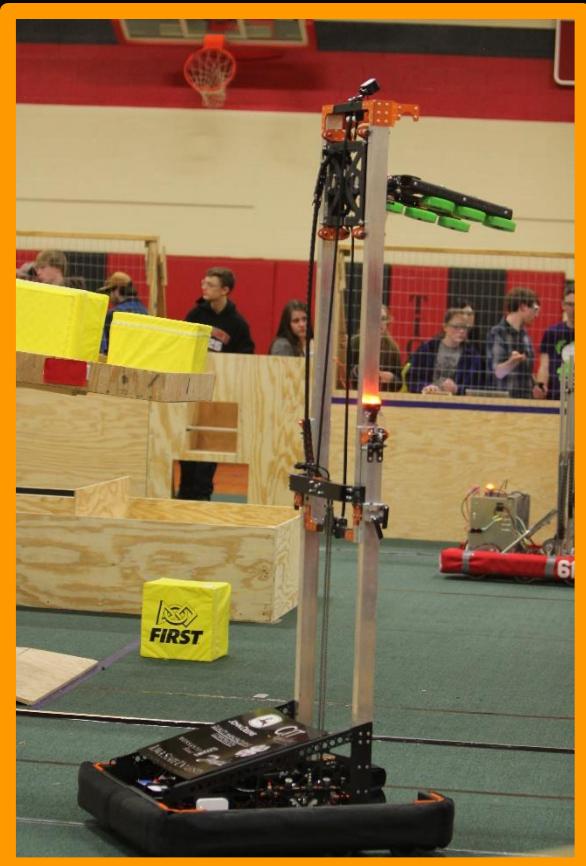
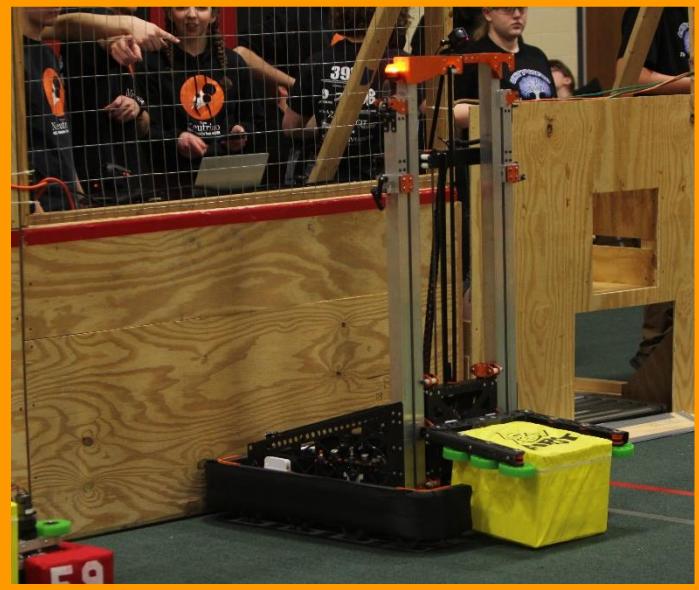
processing technologies critical to food, fiber and fuel value chains. Research is biomass pretreatment to sensor development, food safety systems for reducing global contamination, nanotechnology and seed science to food technology. Much of the work addresses needs within the developing bioeconomy and the challenge of global food security.

Research Areas

- Food safety and quality management systems
- Feed technology, quality and analysis
- Agroforestry, biopesticides and biopesticides
- Agroforestry and biomass conversion to fuel
- Chemosensory and behavioral responses



Corndog Classic Scrimmage



The Corndog Classic Scrimmage is an event for all Iowa teams to come and test their robot before competition

Chairman's Team!



The Chairman's team is hard at work creating and developing the submission! They are also in charge of creating the team's bumpers!

2018



Marketing

2018

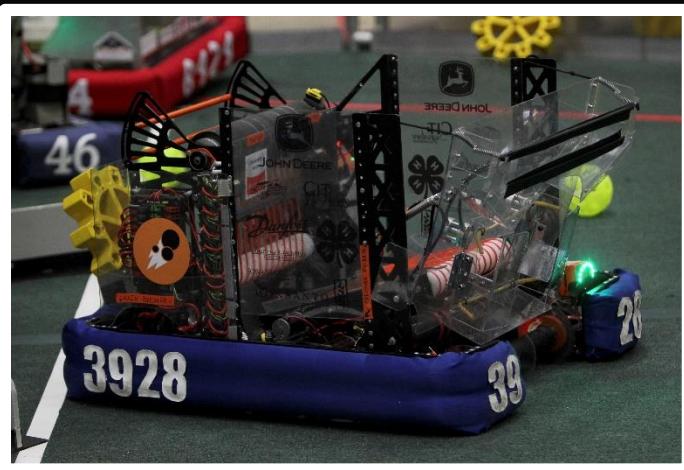


**Award
Submissions**

2018



Preseason



Team Neutrino attends the CowTown Throwdown offseason competition to teach new members about competitions and to bring the team together over the summer

Cow Town ThrowDown



The team created a extremely small robot for offseason practice, which was taken to the EMCC competition

EMCC & Minibot

Battery Plug Project

As an offseason project, Team Neutrino worked with its ISU club partner SME Chapter S132 to learn about injection molding and metal 3D printing. They created battery plugs to be given out as handouts.



2018



Outreach

Science Center of Iowa

**3928 volunteered and demonstrated at four separate SCI events:
Mini Maker Faire, Girls in Science, and an FLL regional competition.**





4th of July Parade

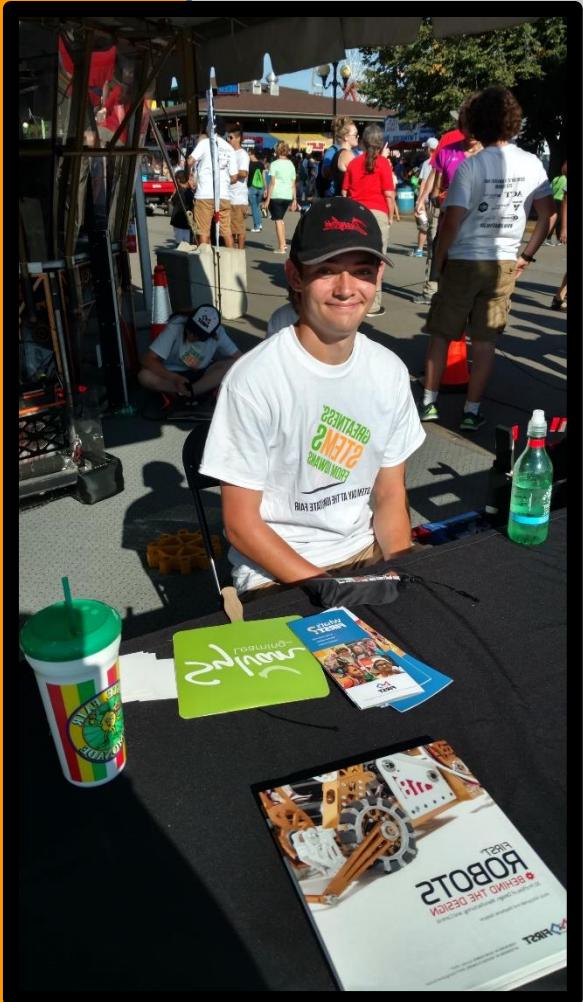


Team Neutrino participated in the city of Ames' 4th of July parade, tossing candy and demonstrating the previous year's robot





Iowa State Fair



During the 2017 offseason, Team Neutrino joined with 967 and 525 to put on a stage act at the fair. They also participated in a booth and demo with 5 other FRC teams.



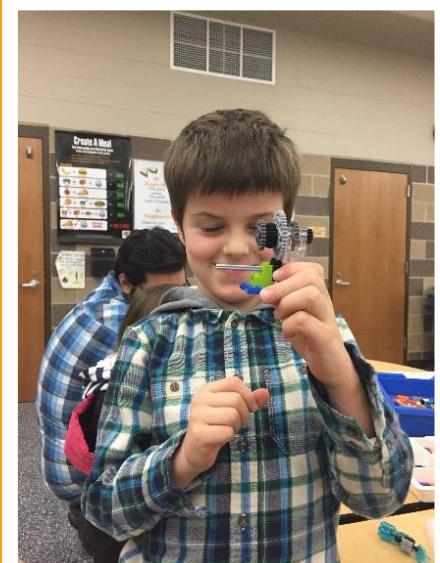


**Team Neutrino
mentored 6 FLL teams
in the 2017 season.**



FLL Mentoring

**In the 2017-2018 season, 3928
mentored 9 different FLL Jr. teams**



FLL Jr.

2018



Newsletters

2018



Team
Documents

Business Card & Button Design

A business card was designed to direct people to the website to learn more about the team. The front has the logo, name, and number, and the back is plain white for use of writing on and other information if needed.



Team Neutrino
FIRST Robotics Team #3928
Story County, Iowa



www.teamneutrino.org | neutrino@frc.com



Buttons and stickers for the team were designed and made to hand out at the competitions.

Sponsorship Letter



Neutrino
FIRST Robotics Team #3928

To our business community,

I'm a student from FIRST robotics team, 4-H Team Neutrino #3928. FIRST stands for "For Inspiration and Recognition of Science and Technology". FIRST aims to inspire and motivate students to pursue education and careers in science, technology, engineering, and math through robotic competitions. At the beginning of each year, a new game is introduced and FRC teams have 6 weeks to build a robot that weighs 120 pounds. If you would like to know more about FIRST, please visit www.firstinspires.org.

Team Neutrino is a seventh season high school community robotics team located in Story County, IA. We are also affiliated with 4-H and ISU College of Engineering. After our six week build season, the team will attend two three-day Regional Competitions. Teams that place in Regional Competitions attend the International Championship, hosted in Detroit, MI. For more information about our team, visit www.teamneutrino.org.

If we reach our annual goal of \$30,000, we plan on using it to cover the costs of registration (\$9000 for two regionals), robot parts (\$5000), and miscellaneous costs and preseason projects, such as practice and training robots, and outreach funds and supplies (\$15,600). We hope to qualify for the Championship Event in Detroit, which would require us to raise even more money (\$5000 for registration).

We appreciate any contribution to the team. Not only does the team need monetary support, we are in need of marketing materials, tools, mentors, fabrication of parts for the robot, and community support. Any contribution is greatly appreciated, and to say thank you we advertise your support wherever we go through our levels of sponsorship:

Diamond (\$5000+) – Large logo on robot, banner, pit, t-shirt; mention on team displays and website
Platinum (\$2500+) – Small logo on robot, banner, pit, t-shirt; mention on team displays and website
Gold (\$1000+) – Logo on banner, pit, and t-shirt; mention on team displays and website
Silver (\$500+) – Logo in pit and t-shirt; mention on team displays and website
Bronze (\$250+) – Mention on team displays and website
Honorable Mentions (\$50+) – Mention on team website

We appreciate your time and consideration in supporting our team!
Please respond to:

Rucha Kelkar
Team Lead
680659kel@ames.k12.ia.us
(515)-708-7730

Moriah Conner
Fundraising Manager
880150con@ames.k12.ia.us
(515)-509-0620

Thank you!
Signed,
Students of Team Neutrino

Ames, Iowa

www.teamneutrino.org

neutrinofrc@gmail.com

A letterhead was designed and used on team documents. Above is a letter used to inform businesses about sponsoring Team Neutrino.

Tri Fold Brochure

What is FIRST Robotics?

FIRST®
For Inspiration and Recognition of Science and Technology

The mission of FIRST is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

Founded by Dean Kamen in 1989, FIRST develops accessible, innovative programs to motivate young people to pursue education and career opportunities in science, technology, engineering, and math, while building self-confidence, knowledge, and life skills.

For more info on FIRST
www.firstinspires.org



Team Neutrino 2018



For more information about our team visit our website at:



www.teamneutrino.org



Team
Neutrino
FIRST Robotics Team #3928

www.teamneutrino.org

About Team Neutrino



The robot above was designed to play FIRST POWER UP. The robot lifts "power cubes" onto a scale in the middle of the field and switches on either side of the field. Students work together to create complex systems to help the robot best complete the challenge.

Team Neutrino faces the exciting challenge of building a robot to compete in FIRST Robotics Competition events. The team is composed of high school students from Story County. Each year a new game is released in the first week of January. The students have six weeks to design, build, and program the robot. While working along-side mentors at their build space at Iowa State University, students solve problems and learn about the field of engineering. They are also responsible for marketing the team, creating a positive team image, designing a website, and fundraising. Team Neutrino students volunteer their time to community events such as team-developed summer camps, robot demonstrations, and community service projects.

FRC is a unique varsity Sport for the Mind™ designed to help high schoolers discover how interesting and rewarding the lives of engineers and scientists can be. Throughout the FRC experience, students gain the technical skills, professionalism and self-confidence that all but guarantee them extraordinary career opportunities.



North Star Regional 2017

Team Neutrino works hard to inspire students at a young age to pursue STEM. The team mentors 15 FIRST teams, runs 8 summer camps, and in 2017 participated in 22 outreach events. Team Neutrino is well known in the community as being a cohesive, spirited group of high schoolers committed to spreading the mission of FIRST.

This brochure was developed as a way to educate the community about our team, FIRST Robotics, and the Mission of FIRST.

The Website





Team Neutrino

FIRST Robotics Team #3928



[Home](#) [About](#) [Contact](#) [Events](#) [Newsletters](#) [Seasons](#) [Sponsors](#) [Alumni](#)

[Resources](#)

Robot Reveal FIRST PowerUp 2018

Posted on **February 26, 2018** by **Sayre Satterwhite**

Team Neutrino's robot reveal is here! Check the video out on our YouTube channel [here](#)! If you want to know more about the robot, click [here](#) to see the specifications and renders of the robot.



Team Neutrino 2018 Robot Reveal

Posted in **Uncategorized**

2018 Iowa Scrimmage

Posted on **February 17, 2018** by **Sayre Satterwhite**

As Team Neutrino's first attended event with their new robot, the Iowa Scrimmage serves as a get together of all Iowa teams to test their robot on a field similar to ones to be used at competition. The event happens just before robots must be bagged, so teams can make any last minute changes before competitions. The event is held in Cedar Falls by the SWARTDOGS, team 525 (You can check them out [here](#)). Team members worked through the day testing and modifying



CHAIRMAN'S
AWARD
2017
MINNESOTA
NORTH
STAR
REGIONAL

DIAMOND SPONSORS



JOHN DEERE



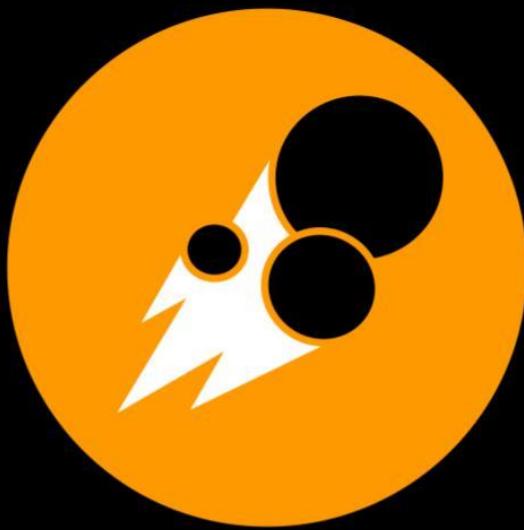
Danfoss



MONSANTO
Fund

PLATINUM SPONSORS

The website offers information about the team and resources the team has developed through our outreach including FLL Jr. lesson plans, FLL team ideas, CAD resources, robotics class resources, fundraising resources, and more!



Team
Neutrino
FIRST Robotics Team #3928

The front of the shirt remains the same from year to year, and the back is updated with the sponsors for each year.

FRONT

**Shirt
Design**

BACK

3928

Thanks to our sponsors:



JOHN DEERE



**MONSANTO
Fund**



**ALLIANT
ENERGY**

**QUALITY MANUFACTURING
CORPORATION**



**INTERSTATE
ALL-BATTERY CENTER**



**CITY OF
AMES**



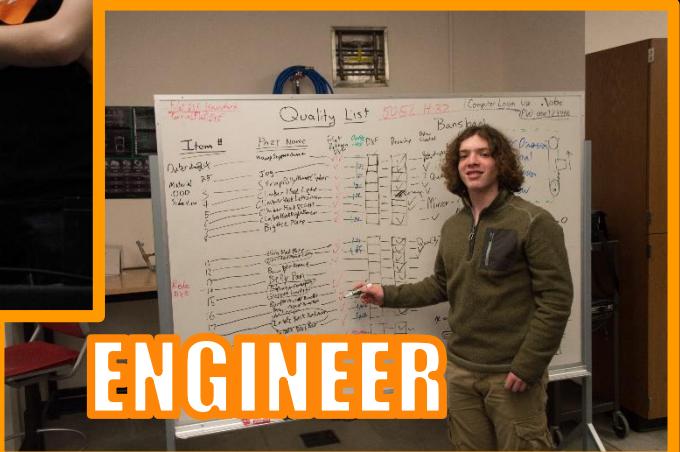
**THEISEN'S
HOME • FARM • AUTO
More For You!**

**IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

CREATE



Quality List 3928



INSPIRE



2
0
1
8



FIRST Robotics Team #3928