



# TEAM NEUTRINO #3928

# 2025 Pit Binder



# REEFSCAPE

SM

PRESENTED BY

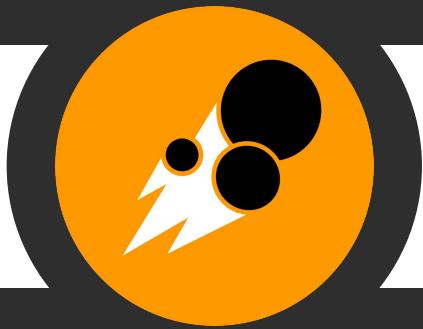


Gene Haas Foundation

[TEAMNEUTRINO.ORG](http://TEAMNEUTRINO.ORG)



@FRCNEUTRINO



# TEAM NEUTRINO

## *Team Mission*

### TRAINING FUTURE ENGINEERS

Team Neutrino's mission is to develop ourselves as leaders, engineers, and community partners, working every day to achieve more with our robots, in our community, and from ourselves than we did the day before.

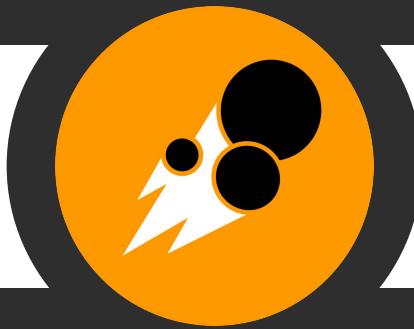
Our program is designed to prepare students for a career in STEM and **in the past 3 years, 88% of Team Neutrino alumni have pursued a STEM career. In 2024, 100% of our graduating class chose STEM related majors.** On our team, knowledge learned in the classroom is practically applied in an environment that gives high school students the hands-on opportunity to solve real-world STEM problems. What began as 9 Ames High School students in 2011 has become a team of 33 Story County students who reach 12,800+ community members each year through countless events, demonstrations, camps, and more. Since 2014, we have mentored 110+ elementary and middle school robotics teams.



88%



CHOOSE STEM CAREERS



# TEAM NEUTRINO

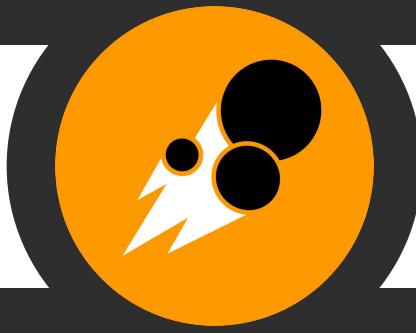
## FIRST Mission



## WHAT IS FIRST ROBOTICS?

*FIRST* is a non-profit organization that designs fun, motivational programs to help young people in grades K-12 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.



# TEAM NEUTRINO

## 2025 REEFSCAPE

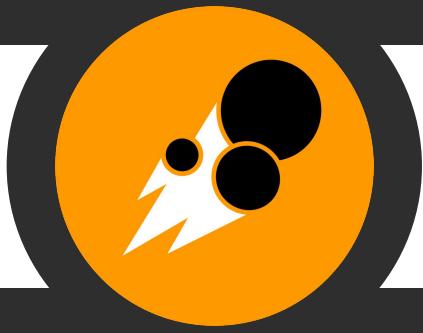
### PLAYING 2025'S REEFSCAPE GAME

In REEFSCAPE presented by HAAS, two alliances compete to score coral on a reef while removing algae to score in the processor or the barge. At the end of the match, robots climb deep or shallow cages to score points. Throughout the game, human players can throw algae into the barge to score more points. In each match, opposing alliances can score algae in their processors to earn a coopertition bonus.



PRESENTED BY   
Gene Haas Foundation





# TEAM NEUTRINO

## *Safety Overview*

### TEAM NEUTRINO SAFETY

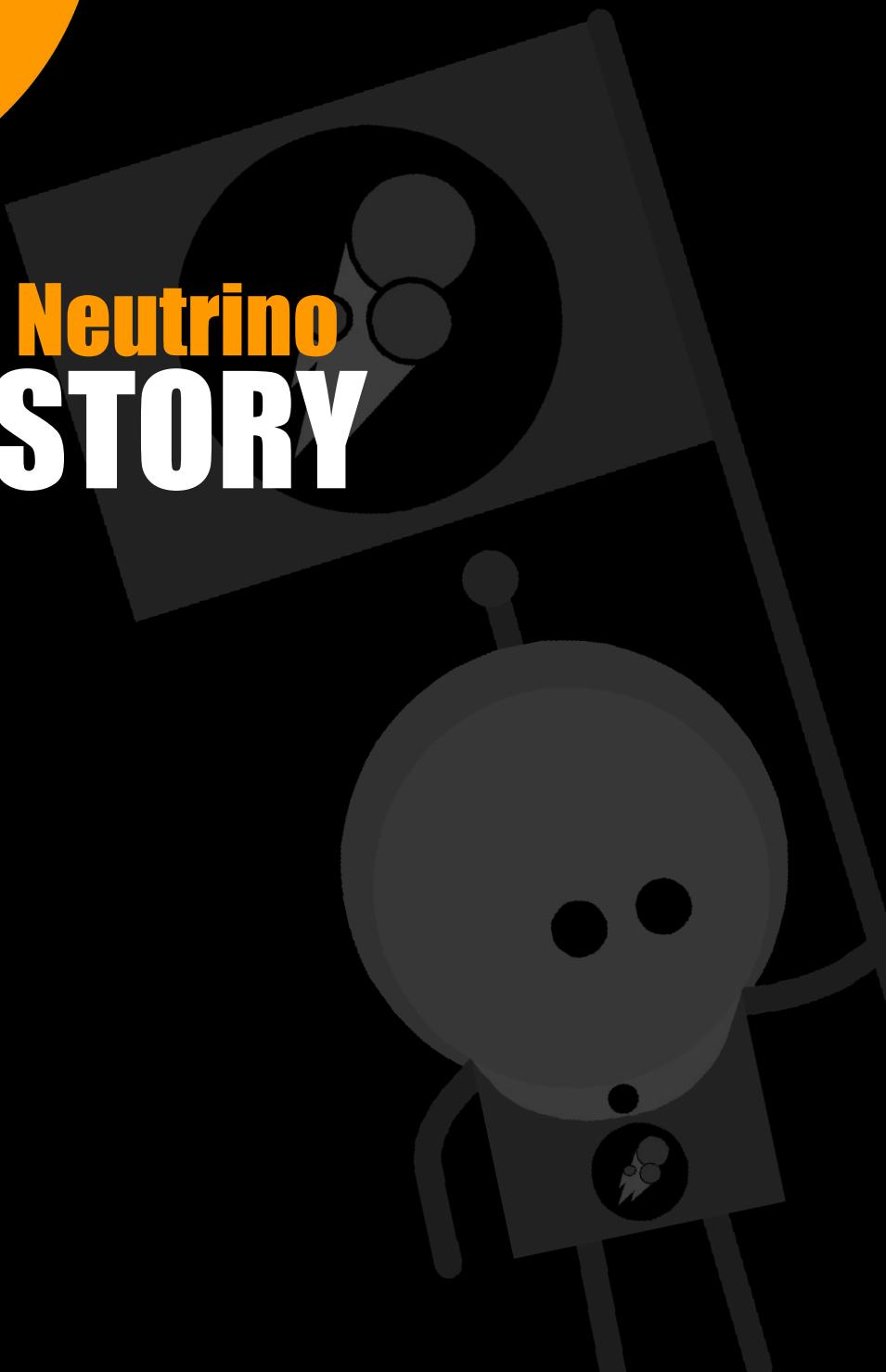
Promoting a culture of team safety is critical to all pillars of Team Neutrino. The team strictly enforces safety glasses and other appropriate PPE when in work areas or operating machinery, and always has a well-stocked first aid kit and a fire extinguisher in all areas. All members complete comprehensive Iowa State University Safety training, and all safety incidents are reported to the Safety Captain. A two mentor policy and sign-in sheet for our workspace ensures accountability.

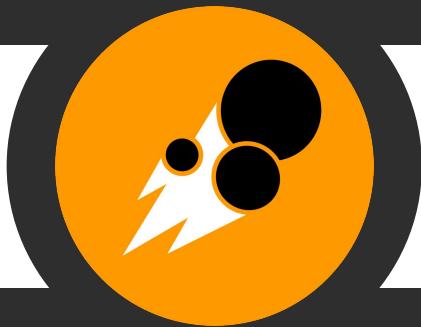




# #3928 Team Neutrino

# TEAM HISTORY





# TEAM NEUTRINO

## *History of Team Neutrino*

### FOUNDING A LEGACY

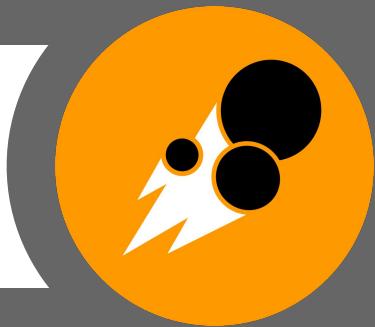
Team Neutrino began with one of our students being invited to attend the Minnesota North Star FRC Regional by her grandfather, a mentor on team 2977, Sir Lancer Bots. After being inspired by the mission, community, and the competition, she became part of the *FIRST* community by founding the first FRC team in her area. She was put in contact with a student at Iowa State University coincidentally looking to start a FRC team. It was a partnership made in heaven.

After establishing an Ames High School workspace and rookie funding via local grants, the team was ready for students who wanted to compete in 2012's Rebound Rumble. When the season was over, Neutrino was invited to join the Story County 4-H Program as Iowa's first 4-H FRC Team. Now Team Neutrino meets on ISU campus and is thriving with 30+ members and a crew of dedicated mentors from local programs and businesses dedicated to competing at the highest level of *FIRST*.

In 2012, the team competed at the Midwest Regional. At the Midwest Regional, the team was ranked 8th and learned a lot about competing in the *FIRST* Robotics Competition as a returning team in 2013.



***“It was a partnership made in heaven.”***



# TEAM NEUTRINO

## 2013-2015



In 2013, the team competed at the North Star and Greater Kansas City regionals. At the Greater Kansas City Regional, the team ranked 9th and received the Excellence in Engineering and Finalist awards. At the North Star Regional, the team finished as #1 seed and won the Innovation in Control and Finalist awards. The team was honored to participate in the Indiana Robotics Invitational with 68 of the top ranked teams in the world.

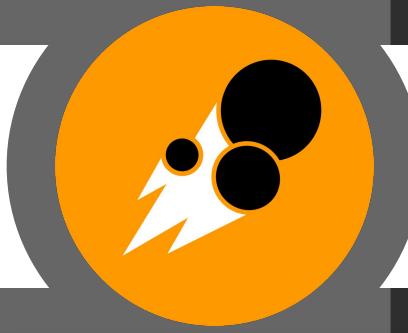


In 2014, the team competed at the North Star and Greater Kansas City regionals. At the North Star regional, the team was awarded Engineering Inspiration. At the St. Louis Championship, the team was picked to be the 4th robot on the 4th seeded alliance in the Newton division, and ended up ranking as semifinalists.



In 2015, the team went to the Central Illinois and North Star regionals. The team placed as quarterfinalists in both, and team member Dagney Paskach won the Dean's List Finalist Award at North Star. The team also won the Cowtown Throwdown offseason competition.

# THROUGH THE YEARS



# TEAM NEUTRINO

## 2016-2018



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 Iowa Regional.

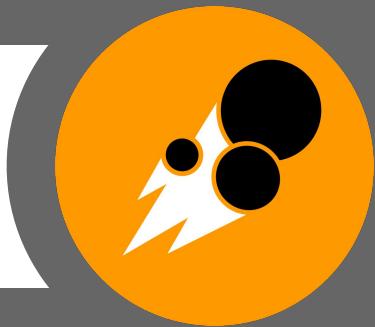


In 2017, Team Neutrino went to the Minnesota North Star regional and the Iowa regional. At Iowa, the team was a quarter finalist and team member Rucha Kelkar won the Dean's List Finalist Award. At North Star, Team Neutrino was seeded 2nd and won the Chairman's Award which allowed them to compete at the World Championship. In the offseason, the team competed at the East Metro Cooperative Competition.



In 2018, Team Neutrino went to the Seven Rivers Regional and the Iowa Regional. At Iowa they were the #2 seed, finalists, and recipients of the Engineering Inspiration award. This qualified the team for the World Championship in Detroit, where they were the 7th seed alliance captains and quarter finalists in the Archimedes division.

# THROUGH THE YEARS



# TEAM NEUTRINO

## 2019-2021



In 2019, Team Neutrino attended the Iowa Regional and Seven Rivers Regional. At Iowa, the team was the #3 seed, with member Nitzan Friedberg named a Dean's List Finalist and the team winning the Quality Award. At the Seven Rivers Regional the team won the Engineering Inspiration Award. This qualified the team for the World Championships in Detroit.

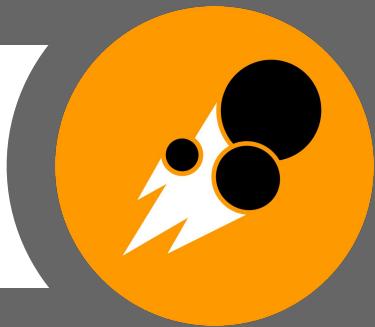


In 2020, Team Neutrino attended the Greater Kansas City Regional and qualified for the cancelled World Championships (in addition to the Iowa Regional). At the Greater Kansas City Regional, the team ranked 3rd and captained the winning alliance, in addition to winning the Engineering Inspiration Award.



In the 2021 remote competition season, the team seeded 1st at the Midwestern Plains district and 17th globally. At the Midwestern Plains District, the team won the Regional Chairman's Award, the Autonomous Award, the Skills Competition Winner Award, Semi-Finalist in the Innovation Challenge Game Design Challenge (Designer's Award), with Quinn Margrett named a Dean's List Finalist.

# THROUGH THE YEARS



# TEAM NEUTRINO

## 2022-2024



In 2022, Team Neutrino attended the Iowa Regional, North Star Regional, and the Houston World Championships. At the Iowa Regional, Team Neutrino won the Engineering Inspiration Award, and Leslie Kim won Dean's List Finalist. At North Star, the team was seeded 4th, as well as winning the Chairman's Award and regional competition. At the Houston World Championships Team Neutrino won the Engineering Inspiration award and the Dean's List Award (Leslie Kim), making us the first team in Iowa for both awards.



In 2023, Team Neutrino attended the Iowa Regional, Northern Lights Regional, and the Houston World Championships. At the Iowa regional, we won the Engineering Inspiration award, which allowed us to qualify for Champs in Houston, and a member of our team, Becky Murphy, was recognized as a Dean's List Finalist. We also won the Excellence in Engineering award at the Northern Lights Regional.



In 2024, Team Neutrino attended the Central Missouri Regional, the Iowa Regional, and the Houston World Championships. At the Iowa Regional, we were awarded the Gracious Professionalism award. We qualified for Champs by winning the Engineering Inspiration award at the Central Missouri Regional. Additionally, a member of our team, Meabh Hennessy, was recognized as a Dean's List Finalist.

# THROUGH THE YEARS



# #3928 Team Neutrino MEET THE TEAM

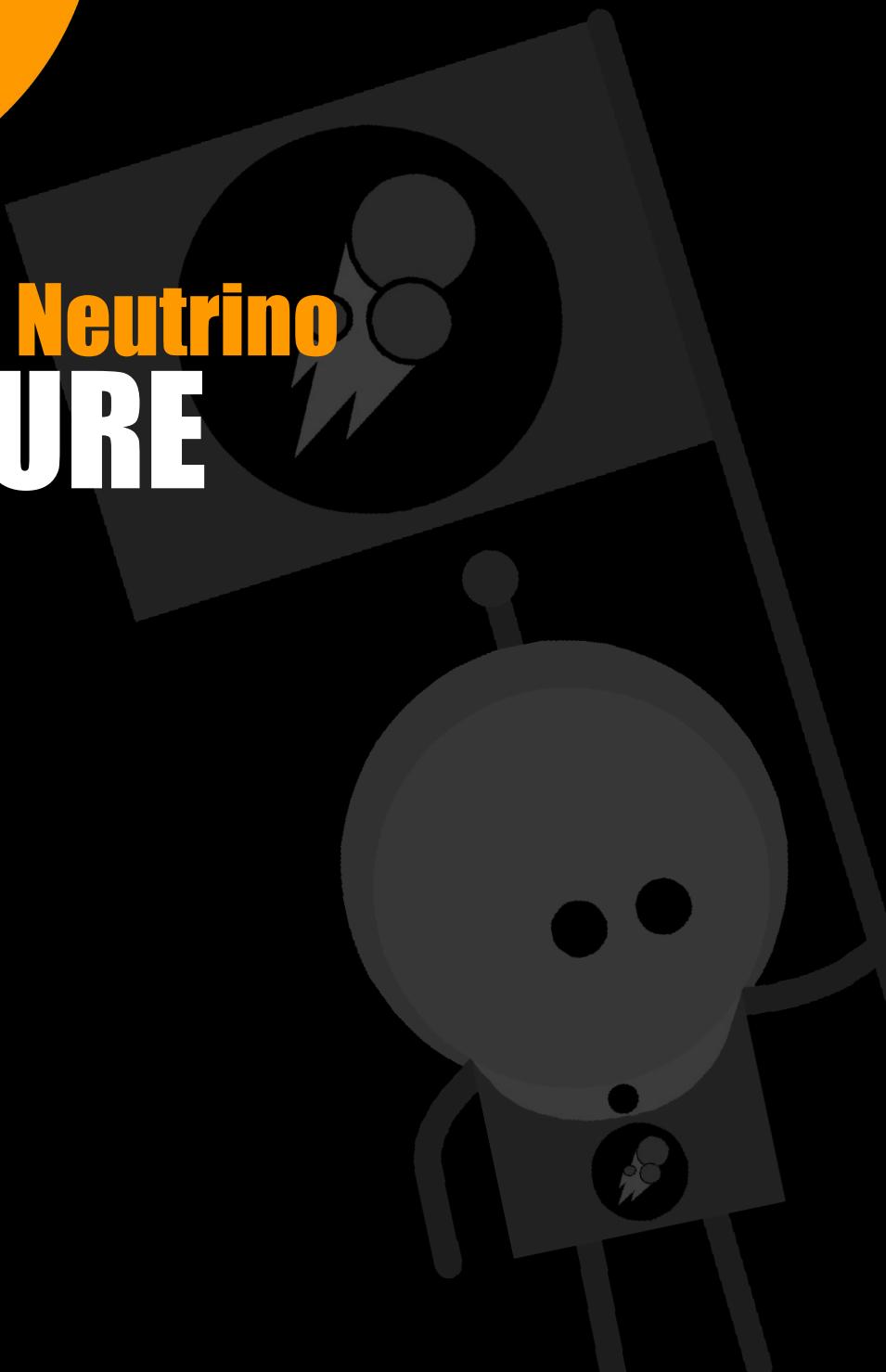








# #3928 Team Neutrino STRUCTURE



# LEADERSHIP CORE

Leadership Core is a group of students, managers, and lead mentors who are heavily involved in the team's decision making. Team members become part of the Leadership Core through an application process and are appointed by the Captains. LC works to make full team organizational decisions in a transparent way, oversees team activities (e.g. recruiting efforts, fundraising efforts, sponsor communication, sustainability), and encourages deeper student leadership and participation.



2024-2025  
**Members**

# STUDENT LEADERS



## **Captain:** Sarah Yao    **Co-Captain:** Anika Shrotriya

As Team Captain and Co-Captain, Sarah and Anika work together to ensure the team is working smoothly and efficiently. They institute the core values of the team, as well as make announcements, send emails, and present at team meetings. As far as individual responsibilities go, Anika oversees all non-technical aspects of the team; this includes graphics, outreach, fundraising, and more. Sarah oversees the technical aspects of the team, which includes design and controls.



**Safety Captain** Maighdlin Larson

The Safety Captain makes sure that all team members and mentors are following *FIRST*'s safety guidelines, as well as safety guidelines outlined by 4-H, Boyd Lab and Iowa State University. Maddie is the main representative to ensure machine training and safety for all members.



**Design Manager** Micah Steward

The Design Manager oversees the CAD design, prototyping, and manufacturing of the team's robot. It is Micah's responsibility to help with design projects and decisions and delegate duties out to members, as well as reporting progress to the team Captains throughout the season.



**Manufacturing Manager** Chetas Aduri

The Manufacturing Manager oversees the manufacturing of the robot. It is Chetas's responsibility to ensure parts can be manufactured correctly and in a timely manner, and to train the underclassmen of the team on how to safely use manufacturing equipment.



**Awards Manager** Anika Shrotriya

The Awards Manager is responsible for overseeing all traditional award submissions, including the Chairman's Award. In addition to maintaining comprehensive awards documentation, Anika manages award timelines and presentations, and trains underclassmen about the process.



The Controls Manager oversees programming and the wiring of the robot. It is Vienna's responsibility to lead coding projects, delegate tasks for programming and wiring of the robot, and to report progress to the team Captain progress throughout the season.

**Controls Manager** Vienna Rossmanith



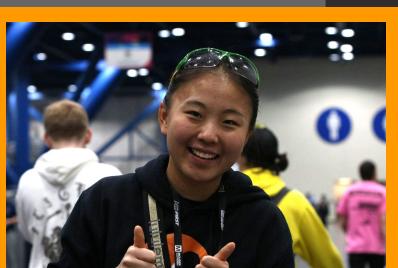
The Fundraising Manager is in charge of submitting grants, grant reports, managing incoming awarded grants, and maintaining sponsor relations. Meabh also maintains the overall team budget and acts as the primary contact for sponsors and community partners.

**Fundraising Manager** Meabh Hennessy



The Graphics Manager is in charge of the team's image and making sure that the team image is recognizable and consistent from year to year. Laura oversees the production of printed materials, video content, and social media publications.

**Graphics Manager** Laura Wang



The Outreach Manager is in charge of organization and documentation of all outreach events, and acts as an ambassador for new community events and connections. Laura maintains local relationships and establishes new community outreach opportunities for the team.

**Outreach Manager** Laura Chen

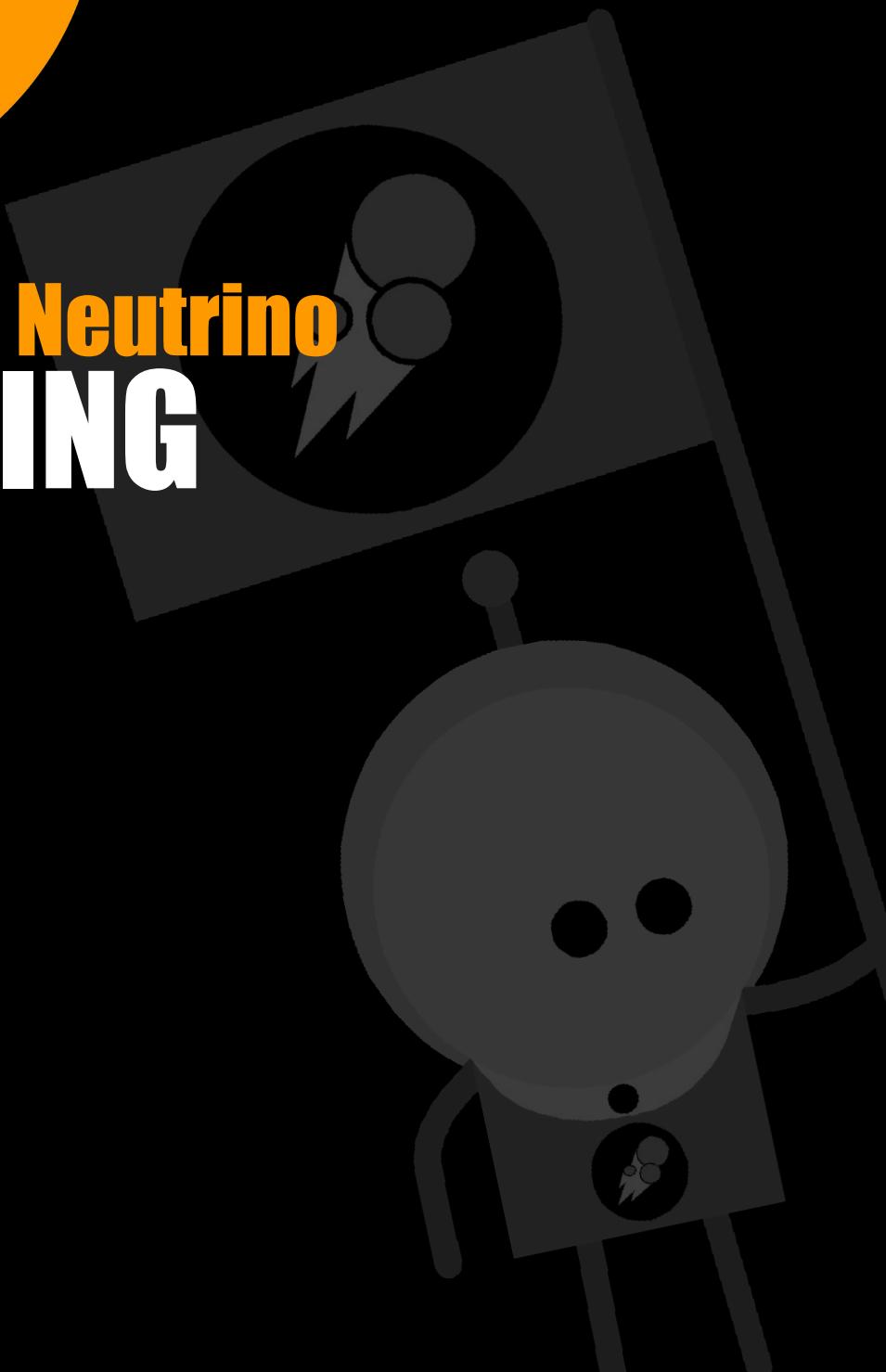


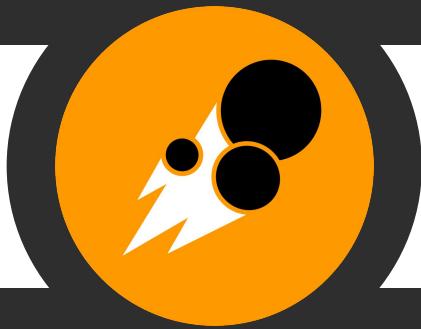
The scouting manager is in charge of the programming of the Scouting App. Matthias is responsible for leading the design of the website and the spreadsheet. He is also supposed to report progress to the team Captain progress throughout the season.

**Scouting Manager** Matthias Roettger



#3928 Team Neutrino  
MARKETING



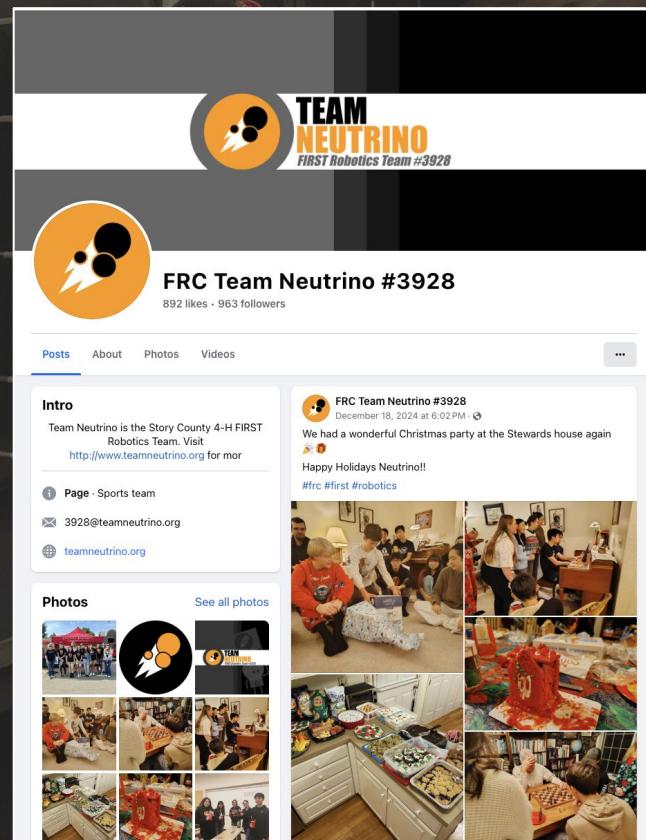
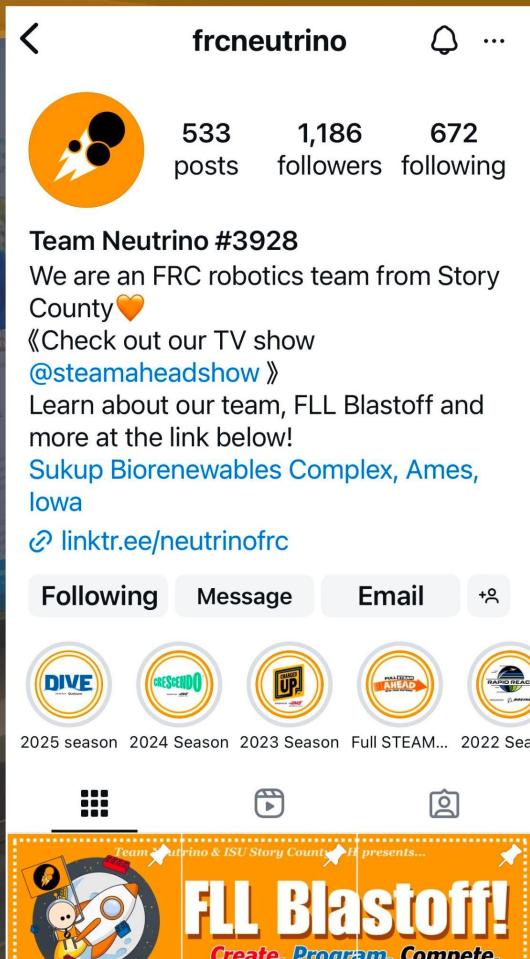


# TEAM NEUTRINO

## Team Branding

## BRANDING THROUGH SOCIAL MEDIA

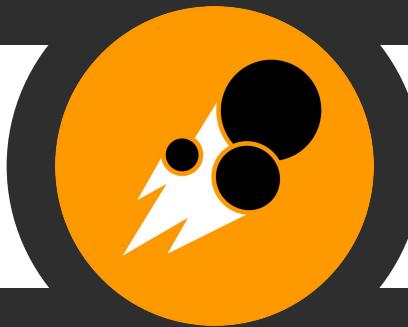
As an extension of our apparel and in-person branding (including printed materials, such as this binder), Neutrino uses official Instagram, Facebook, and YouTube outlets to promote team interests, communicate directly with sponsors and partners, supply basic *FIRST* recruitment information, and promote team events and digital outreach initiatives. Upholding our detailed branding elements (as detailed in our Identity Standards) has seen a drastic improvement in overall effectiveness.





# #3928 Team Neutrino IDENTITY STANDARDS





# TEAM NEUTRINO

## *Table of Contents*

### **Introduction ... 1**

Purpose of the Identity Standards and team identification

### **Logo Treatments ... 2**

Guidelines regarding team, secondary, and partner logos

### **Color Palette . . 3**

Team primary and secondary color pallets

### **Typography ... 4**

Team primary and secondary fonts

### **Media Templates ... 5**

Usage of templates for printed and promotional materials

### **Digital Management ... 6, 7**

Fair usage of official team social media, website content, and videos

### **Sponsor Recognition ... 8, 9**

Sponsor levels, communication, and thank-yous

### **Apparel Regulation ... 10**

Regulations of official team apparel and distribution

### **Safety and Dress Code ... 11**

Standard dress code elements for all team events

### **Other Branding ... 12**

Other branding: robot polycarb, publications

### **Graphics Leadership ... 13**

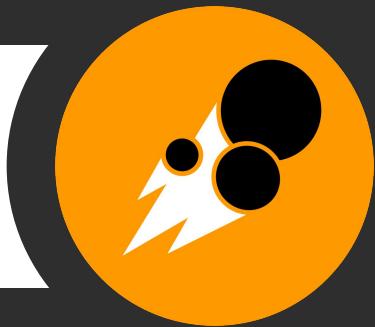
Leader and team contact information

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## Introduction

### Identity Standards

The success of our team brand depends on the consistent and frequent use of key identity elements, which, when used effectively, produce a powerful and lasting impression.

### Purpose of Identity Standards

Team Neutrino has developed these comprehensive identity standards to help strengthen our brand through consistent display. By having a unified brand, our team appears more professional and stands out as a premier team in our community, online presence, and events in which we participate.

### Team Identification

The official team name is to be used in any formal or written documents. The nickname may be used in any non-formal situations.

Official Team Name: The official Team Neutrino team name changes year to year depending on sponsor support, so consult <https://www.TheBlueAlliance.com/Team/3928> for our current full team name for official use.

Team Nickname: Team Neutrino

In written and verbal communication, Team 3928 should always be referred to as "Team Neutrino," "Team 3928," "3928," "Neutrino," "FIRST Team Neutrino 4-H," "Story County 4-H FIRST Robotics Team Neutrino," "Story County 4-H Robotics," "3928," "FIRST Robotics Team 3928," or "FRC Team #3928, Team Neutrino."

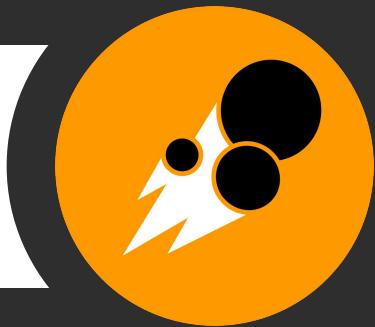
Team Neutrino should not be referred to with any alias not stated above. The team name cannot be changed without complete consensus of the Team Neutrino students and mentors.

For more information, visit

**TEAMNEUTRINO.ORG**



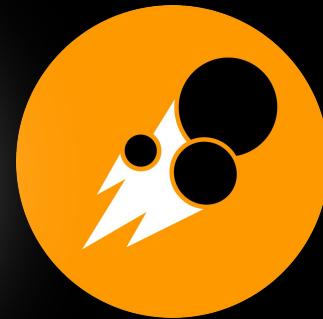
**@FRCNEUTRINO**



# TEAM NEUTRINO

## *Logo Treatments*

The Team Neutrino logo should be used in compliance with the standards here. In most situations, the logo should be displayed on a dark background. The team's logos should be used on backgrounds that do not distract from the image.



The orange logo should be used as the primary logo, but the back logo may be used when it better aligns with our brand or is used on an orange background. Keep the logo area clear of distracting elements such as type, photographs or textured backgrounds. The logo should always be seen clearly. The orange version of the logo is preferred. All graphics files (logos, stationeries, templates, etc) are available on <http://www.TeamNeutrino.org/Brand/> and on the team drive. The latest official templates should be used whenever possible.

### **Secondary Logo Treatments**

Logos for partner and associate programs to Team Neutrino (initiatives and programs Team Neutrino has started) should be given the same respects as our own logo. Neutrino Guy does not have to follow these guidelines, but should be used within reason (for this reason, many variants of Neutrino guy exist, often in different colors). Sponsor logos must follow the organization designated guidelines. In addition, inter-team logos (for example the Stay-At-Home STEAM logo) should be respected to the same extent.

### **Unacceptable Logo Treatments**

The logo should not be:

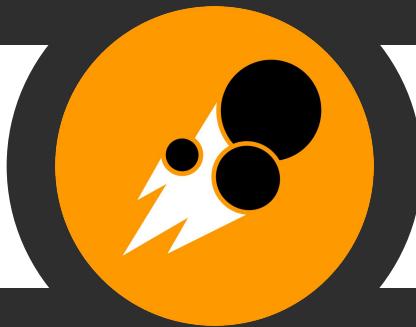
- Stretched out of proportion
- Cropped
- Styled with any 3D effect
- Excessively tilted or rotated
- Displayed in an unrecognizable opacity or color

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## Color Palette

### Color Palettes

The predominant color in all communications materials should be selected from the primary palette. Accent text and graphics may be displayed in any of the primary or secondary colors. The Team Neutrino palette should always be displayed on the RGB scale when possible. For certain video or media projects, the use of non-approved text styles or colors may be used (in moderation) if approved by graphics leadership.



#### Primary Orange

#FF9900 R:255 G:153 B:0 C:0 M:40 Y:100 K:100 PMS:165

#### Secondary Orange

#FF6600 R:255 G:102 B:0 C:0 M:60 Y:100 K:100

#### Primary Black

#000000 R:0 G:0 B:0 C:0 M:0 Y:100 K:100

#### Primary White

#FFFFFF R:255 G:255 B:255 C:0 M:0 Y:0 K:0

#### Primary Light Grey

#C8C8C8 R:200 G:200 B:200 C:0 M:0 Y:0 K:22

#### Secondary Light Grey

#666666 R:102 G:102 B:102 C:0 M:0 Y:0 K:60

#### Secondary Medium Grey

#2E2E2E R:46 G:46 B:46 C:0 M:0 Y:0 K:82

#### Secondary Dark Grey

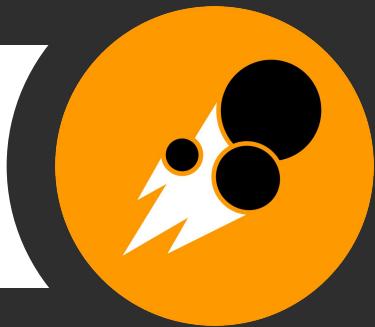
#171717 R:23 G:23 B:23 C:0 M:0 Y:0 K:91

For more information, visit

**TEAMNEUTRINO.ORG**



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# TEAM NEUTRINO

## Typography

### Written Media

The Team Neutrino colors and fonts should be used in compliance with the standards here. Only when necessary should other fonts and colors be used.

### Typography

Team Neutrino has elected to choose a set of fonts to use in all written communication. The primary fonts (Verdana and Georgia) should be used primarily for all written communication. The secondary font (Impact) should be used for headlines and accents, as well as the team number as a main heading or as part of the logo. Vertical lettering should be avoided wherever possible.

**Quick Reference**

- If you need to purchase a team credit card, you don't have the card if you don't already know. Then, call that person and explain where you are and what you would like to purchase, so you'd like them to read off the number to you. As they're reading it, read it to whomever you're paying.
- All the computers in Sukup Hall have Adobe Suite and Office on them. If you don't have it on your own computer, ask a student mentor (if you don't have an ISU net-ID) to sign you into one of the computers so you can use the programs you need.
- The computers in Black 0006 and Parks Library have Adobe Premier Pro on them, while the Sukup computers do not. Black's computers may not always have the most current versions of Premiere, so they may not be able to load Premiere files saved from personal computers.

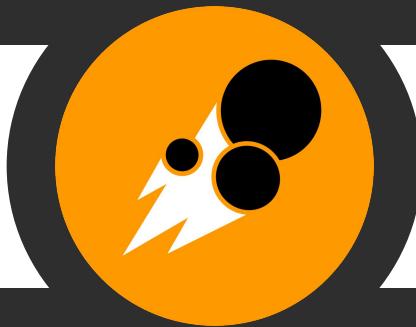
Unless another color is absolutely necessary, team fonts should be used in conjunction with the team's primary and secondary color palettes.

For more information, visit

**TEAMNEUTRINO.ORG**



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# TEAM NEUTRINO

## Join Now!

All versions of the logo and other team-related graphics are available at <http://www.TeamNeutrino.org/Brand/> in various file formats. Internal team templates (presentations, headers, etc) are available on the team drive and should be used as-is wherever applicable. SVG files should be used whenever possible in print applications (SVG is a vector file format and can be scaled). PNG files should be used on websites and in screen applications. WMF files should be used in Microsoft Word and Office documents (WMF is a vector file format that can be scaled and can be easily embedded in Microsoft).

Timeless > Default branding > Updated Templates 2024 ▾

- 4:3 (Public) Slide...
- 16:9 (Internal/Tea...
- Brochure Tem...
- Robot Reveal Fly...
- Social Media Ban...
- Spec Sheets T...

Preview

Open with

- Share
- Get shareable link
- Add to workspace
- Move to
- Add to Starred
- Rename
- View details
- Make a copy
- Report abuse
- Download
- Remove

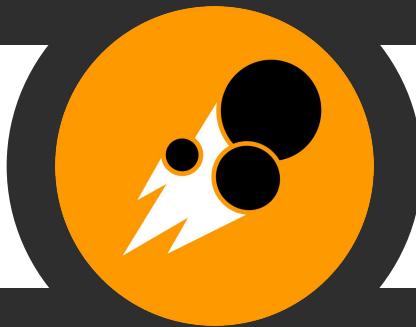
The team drive also provides variants for the modern Team Neutrino stationery, **to be used whenever possible for consistency**. It contains templates for binders, cards, presentations, newsletters, etc.

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

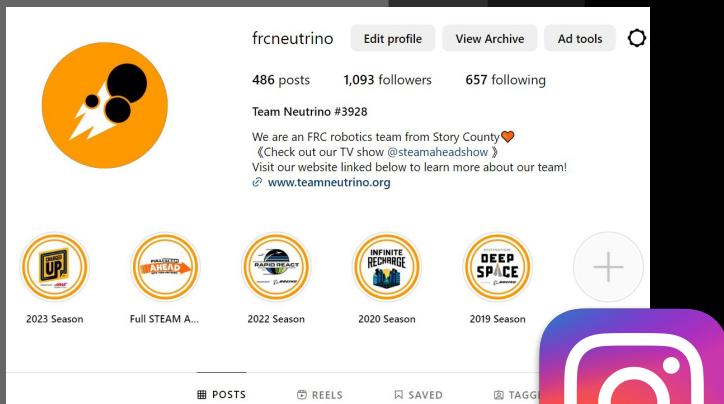
## Digital Management

### Online Presence

Team Neutrino's online image is just as essential to maintain as our in-person image. Engaging with the community is an essential part of our team, and this relies on a consistent and appropriate image. Following our identity standards online increases our impact and furthers our brand.

### Social Media

When engaging with social media, official Team Neutrino accounts should be managed effectively. This includes keeping our information and posts current on all platforms (to keep sponsors and the community informed and engaged) as well as upholding an approachable but professional image. Members or team mentors pictured in social media should follow the team apparel standards whenever possible, specifically noting the use of safety glasses and any other PPE when necessary. It's essential to communicate with other members before posting to ensure consistent branding between events and digital publications, as well as referring to the social media planner for scheduling posts.

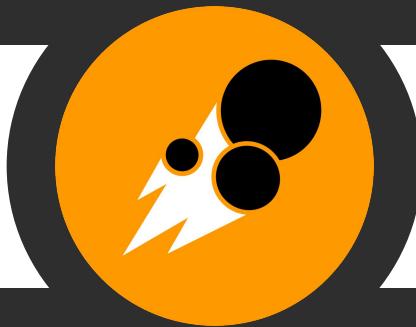


For more information, visit

**TEAMNEUTRINO.ORG**



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# TEAM NEUTRINO

## Digital Management

### Video Publications

Team Neutrino's video productions should stay current with the current team events. When members or mentors are portrayed, they should be following the team apparel guidelines. Video publications should remain professional and should be used to portray the team message. All Team Neutrino videos should have a professional title, description, and be used in conjunction with a custom thumbnail (past videos may not utilize these, but all future videos must) that is based from the thumbnail template. All video and YouTube publications should be approved by graphics leadership before publication to ensure consistency of quality under the Team Neutrino brand, and must utilize a Neutrino intro/outro sequence containing the team logo. Intro sequences can be provided (for internal Team Neutrino use only) as unlisted YouTube uploads. Intro sequences for unique video series (such as Stay-At-Home STEAM) can be found as well and should be used respectively (but are not replacements for the required standard Team Neutrino intro). Team videos should utilize a team watermark if applicable, and **all publications must be 1080p or higher.**

### Website Usage

Team Neutrino's website, [www.teamneutrino.org](http://www.teamneutrino.org), should be regularly updated and follow the identity guidelines (color pallet, text, graphic style, etc.) to uphold Team Neutrino's brand. Our website should be used as a professional contact for sponsors, new members, and the general public.

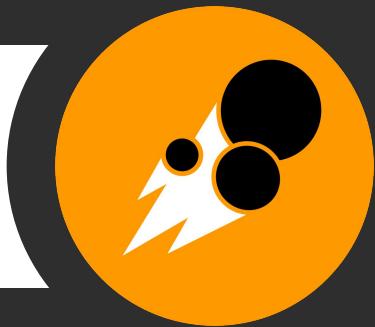


For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## Sponsor Recognition

**\$2K  
and up**

### **Emerald Support**

Small Logo on banner, pit, team shirts, and mention in team displays and literature

**\$2.5K  
and up**

### **Platinum Support**

Medium logo on robot, banner, pit, team shirts, and mention in team displays and literature

**\$5K  
and up**

### **Diamond Support**

Large logo on robot, banner, pit, team shirts, and mention in team displays and literature

**\$10K  
and up**

### **Champion Support**

XL logo on robot, banner, pit, team shirts, and mention in team displays and literature, special mention in all social media, video, and other media releases

**\$50  
and up**

### **Special Mention**

Mention in team literature

**\$250  
and up**

### **Bronze Support**

Mention in team displays and literature

**\$500  
and up**

### **Silver Support**

Small logo in pit, team shirts, and mention in team displays and literature

**\$1K  
and up**

### **Gold Support**

Small Logo on banner, pit, team shirts, and mention in team displays and literature

## **Sponsor Levels**

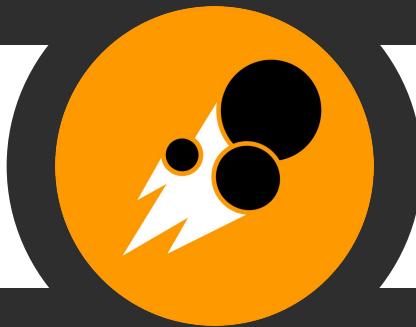
To properly recognize our thanks for the generous sponsorships provided to us by our sponsors, we require sponsor recognition wherever possible. A list of current sponsors can be found at our website, <http://www.TeamNeutrino.org/Sponsors/>. Sponsor logos often have specific guidelines attached to the usage, and must be used as specified by the sponsor. They should be given the same respect as the Team Neutrino logo.

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## *Sponsor Recognition*

### **Sponsor Recognition**

Sponsor communication is an important link between our activities and maintaining sponsors. Sponsor communication should be utilized professionally, and used as a tool to continue to engage and collaborate with sponsors beyond donations. Communication with sponsors includes timely newsletters to update them on our activities. These newsletters should follow the identity standards and remain reasonably consistent between issues. Other sponsor communications (social media posts, video or written thank yous, cards or physical media, etc.) should remain professional and polite, and adhere to our standards whenever possible.

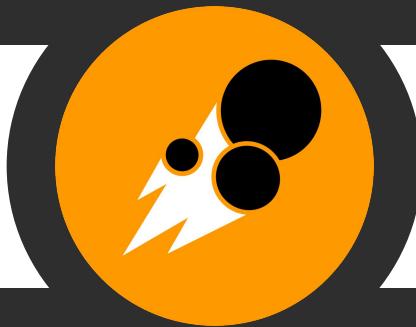


For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## Apparel Regulation

### Apparel

Each year, Team Neutrino will print one primary team shirt (with an official sweatshirt variant) and may print other official or non-official team apparel if needed. The primary team shirt should always be black. The design should contain the logo with the team name and "FIRST Robotics Team #3928" in the center. The back should contain the team number. Below the number, the diamond, platinum, gold, and silver sponsors should be featured. Other team apparel may or may not contain team identity elements (for example, team hats must include our logo but may opt to not include our full team name and number).

Team Neutrino reserves the right to produce non-official shirts and apparel for use outside of the designated uniformed events (competitions, robot demonstrations, outreach events, recruiting events, and other major team events indicated by leadership). Team Neutrino may also create other official or non-official shirt variants at its discretion, such as anniversary or commemorative designs (or even polo shirts), provided that they meet the identity requirements and uphold the integrity of our brand. Any official shirts, hats, or sweatshirts should always contain a centered team logo. Team members are not to sell or redistribute any official team apparel.

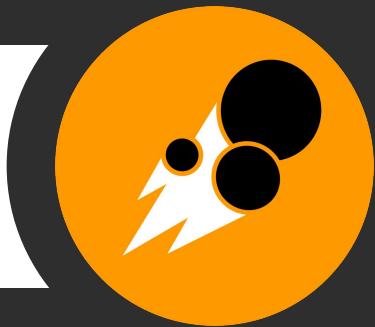


For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## *Safety and Dress Code*

**All team members are expected to wear a uniform consisting of the following elements:**

### **Personal protection equipment**

When working with the robot or at competitions, safety glasses are required; use good judgement in other situations. Safety glasses are often encouraged, even when not absolutely necessary.

### **Shirts/sweatshirts**

Members are expected to wear the current team shirt and/or sweatshirt at events (however some events allow for past shirts as well; this depends on the given event. Team leadership will advise on how the team dress code should be adhered to if the situation is not explicitly stated). Official team shirts or sweatshirts should not be covered or obstructed when indoors and should not be worn over any non-team collared shirts. During most events, members are expected to wear the current team shirt, but are allowed to wear other shirts if designated by leadership.

### **Pants/shorts**

Members are permitted to wear jeans/denim shorts or khaki pants/shorts. For outreach events reasonable shorts are permitted, but for certain events (competitions, sponsor visits) full length pants are required for safety and/or branding purposes.

### **Footwear**

Members are expected to wear close-toed shoes to ensure safety.

### **Optional**

Optional Team Neutrino apparel (i.e. teams hats) are optional and may be worn in addition to the uniform at any event.

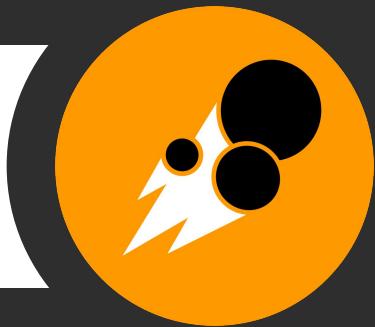
**Above all, dress reasonably, safely, and professionally.**

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**

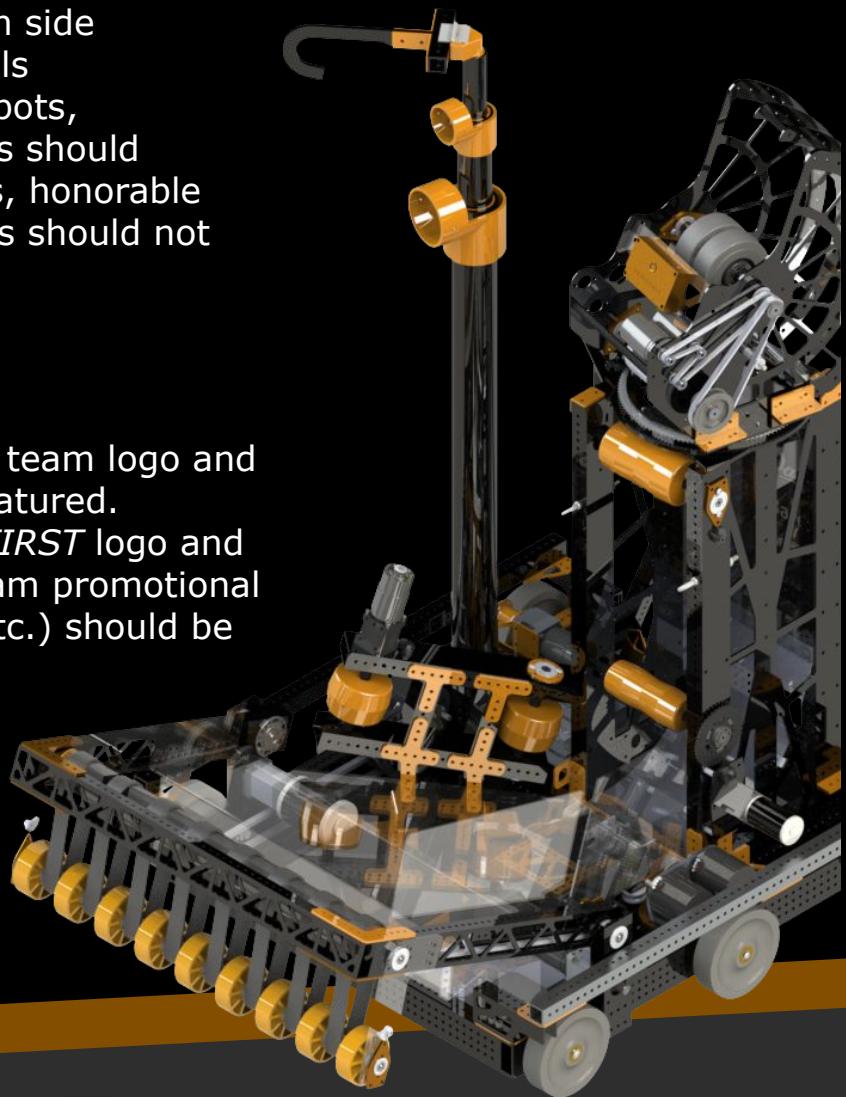


# TEAM NEUTRINO

## Other Branding

### Robots

Team Neutrino's competition robots should always display the team number and the logos of all platinum and diamond sponsors when displayed publicly or in competition. All graphics, sponsor logo layouts, and side panels must be approved by the graphic design leader. On FRC robots, the "3928" numerals should be displayed in white on each side of the robot's bumpers. The numerals should be at least 4" high. On all robots, platinum and diamond sponsor logos should be shown. Logos of bronze sponsors, honorable mention sponsors and non-sponsors should not be shown.



### Publications

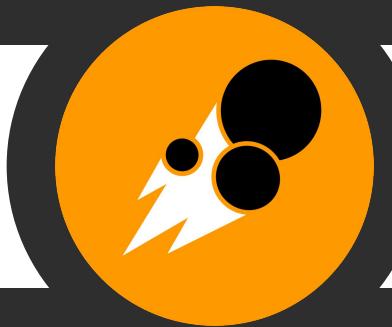
On team fliers and publications, the team logo and team nickname should always be featured. Furthermore, if at all possible, the *FIRST* logo and the 4-H logo should be pictured. Team promotional materials (flyers, business cards, etc.) should be used professionally.

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**



# TEAM NEUTRINO

## Graphics Leadership

The Team Neutrino graphic design leaders are responsible for maintaining and enforcing the Identity Standards.

### Current Graphics Manager

Laura W

### Current Graphics Mentor

Dagney Paskach

[dagneypaskach@gmail.com](mailto:dagneypaskach@gmail.com)

### Current Co-Captain

Anika S

### Team contact information



[3928@teamneutrino.org](mailto:3928@teamneutrino.org)



[@frcneutrino](https://www.instagram.com/frcneutrino)



[FRC Team Neutrino #3928](https://www.facebook.com/FRC-Team-Neutrino-3928)

*The Team Neutrino graphics team reserves the right to modify these standards at any time if necessary. Any modifications must be approved by a consensus of all Team Neutrino student leaders and mentors. Updates to this document exclusively for the purpose of keeping team/sponsor information current (or making minor grammatical or visual corrections) don't need full approval to be fixed by graphics leadership (this includes updating contact information for leadership each year). Graphics leadership reserves the right to make reasonable and minor exceptions from these standards on a project-by-project basis, mainly for accent elements on video and media publications.*

*Last updated February 2025*

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**

# SPONSOR LETTER



## TEAM NEUTRINO

*FIRST Robotics Team #3928*

Dear Ames Electric,

My name is Meabh, and I am the fundraising manager from the FIRST robotics team, 4-H Team Neutrino #3928. We are affiliated with the ISU College of Engineering. Team Neutrino faces the exciting challenge of building a robot to compete in FIRST Robotics Competition events. FIRST stands for "For Inspiration and Recognition of Science and Technology." Founded in 1989, FIRST aims to inspire students to pursue STEM through the world of robotics. Every year, a new game is introduced and FRC teams around the world have 7 weeks to build a robot weighing 125 pounds. If you would like to know more about FIRST, please visit [www.firstinspires.org](http://www.firstinspires.org).

Team Neutrino is going into our 14th season as a high school community robotics team located in Story County, IA. Following our seven-week build season, we will compete at two three-day regional competitions. Last season, Team Neutrino won the Engineering Inspiration award at the Central Missouri regional, qualifying us for the championship in Houston. We also won the Gracious Professionalism award at the Iowa Regional.

Furthermore, Team Neutrino gives back to the community by hosting and attending outreach events. Team Neutrino prioritizes outreach to spread interest in FIRST and STEM by reaching out to our community. Team Neutrino has reached 12,000+ individuals this season through our 800+ volunteer hours. In total, we have mentored 125+ elementary and middle school robotics teams. Over 80% of our alumni have pursued a STEM career. This year we are expanding our outreach efforts by hosting a new summer camp called FLL Blastoff! With FLL Blastoff!, Team Neutrino aims to prepare students for the upcoming FIRST Lego League (FLL) season and teach them lifelong STEM skills, like coding, teamwork, and problem-solving. To learn more about our team and our upcoming camp, please visit [www.teamneutrino.org](http://www.teamneutrino.org).

Team Neutrino's annual fundraising goal for the upcoming season is \$50,000. This budget covers the costs of registration (\$9000 for two regionals), and travel expenses (\$7,000), the remaining budget is allocated towards robot parts, miscellaneous costs, preseason projects, and outreach funds and supplies. We hope to qualify for the Championship Event Houston again, requiring us to raise even more money (\$20,000 for Championship registration and transportation).

We encourage you to continue your annual donation of \$1,000. Not only does our organization require financial support, but we also need help with marketing materials, tools, mentors, manufacturing, and support from the community. Every contribution, no matter how big or small, will be greatly appreciated. To show our appreciation, we will honor your support through our sponsorship levels.

Champion Support (\$10,000+) – XL logo on the robot, banner, pit, team shirts, and mention in team displays and literature, special mention in all social media, video, and other media releases  
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 the team website

Thank you for your continued time and consideration in supporting our team!

**Meabh H**  
FRC Team Neutrino

Ames, Iowa

[www.TEAMNEUTRINO.org](http://www.TEAMNEUTRINO.org)

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

# TRI FOLD PAMPHLET



## 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, which inspires innovation, and fosters 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.

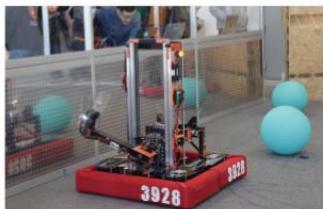
For more information, visit  
**FIRSTINSPIRES.ORG**



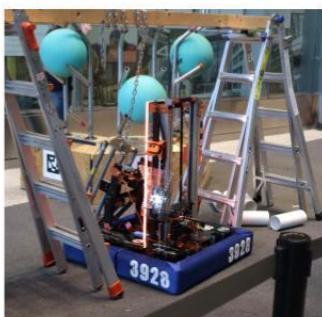
For more information, visit  
**TEAMNEUTRINO.ORG**



Find us on social media  
**@frcneutrino**



This year's robot was designed to play the 2025 game, Reefscape! In this challenge, teams compete to earn points by harvesting game pieces called algae, seeding coral on their reef, and returning to their "barge." At the end, robots attempt to climb various cages of different heights.



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 who design, build, and program a robot to complete each year's challenge (released in January).



## REEFSCAPE

PRESENTED BY

While working alongside mentors at their build space at Iowa State University, students solve problems and learn about the field of engineering. Beyond the competition field, students are responsible for marketing the team, creating a positive team image, designing a website, fundraising, and hosting community events. Team Neutrino students volunteer their time to community events such as team-developed summer camps, robot demonstrations, and community service projects.

## FIRST ROBOTICS COMPETITION

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

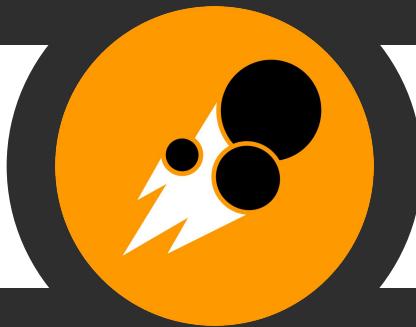
Last season at the Iowa Regional, Team Neutrino was awarded Gracious Professionalism for exemplifying the FIRST core values and encouraging high quality work. At the Central Missouri Regional, we won Engineering Inspiration, qualifying us for World Championships, and Meabh, a member of the team, became a Dean's List Finalist!

This brochure was developed as a way to educate the community about our team, FIRST Robotics, and the Mission of FIRST. It details out accomplishments of the now-completed season.



**#3928 Team Neutrino  
PRE-SEASON 2025**





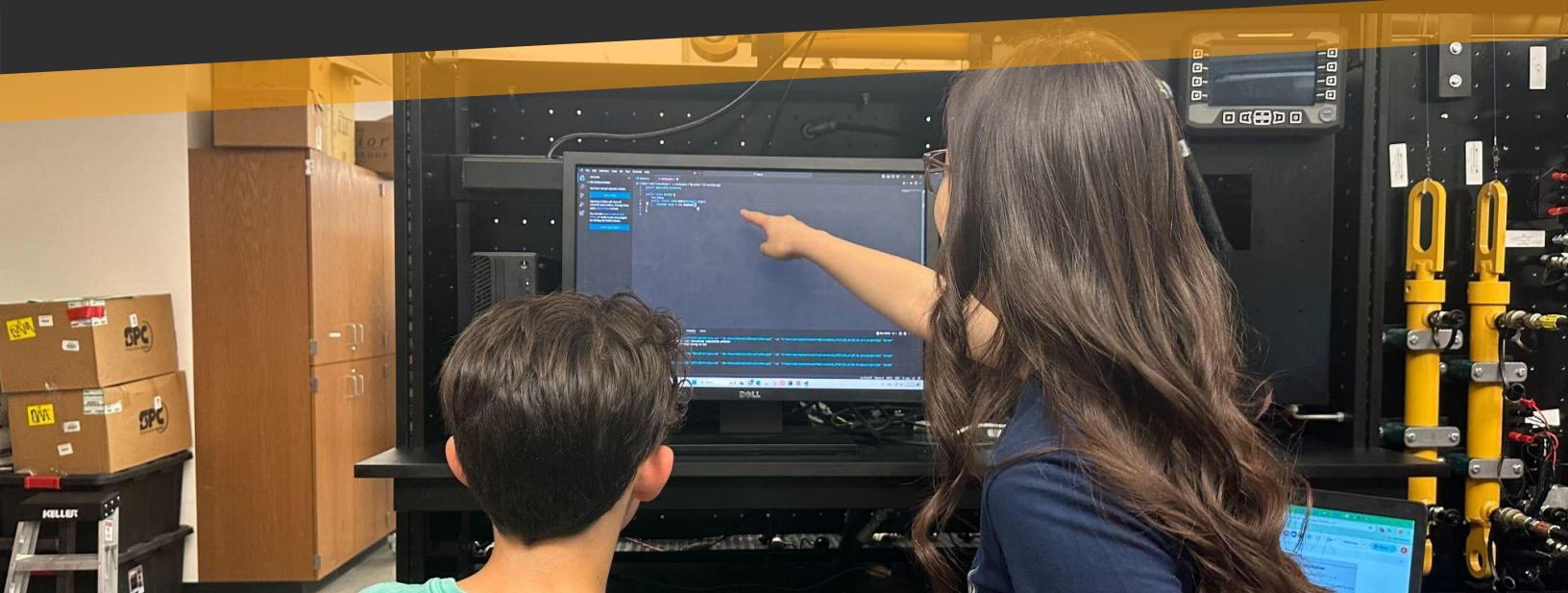
# TEAM NEUTRINO

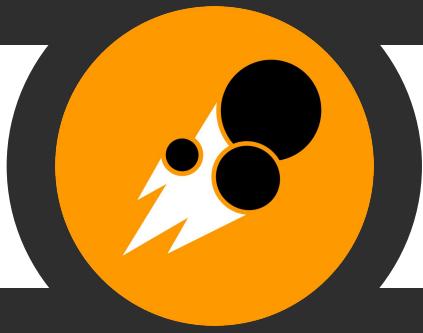
## *Training Camps*



### LEARNING NEW STEM SKILLS

This past summer, Team Neutrino hosted training camps where new and existing members alike could deepen their knowledge and skills regarding various aspects of the team. These camps centered around teaching the basics of **graphic design**, **outreach planning**, **prototyping**, **CAD**, **manufacturing**, **programming**, and learning **electrical** and **pneumatic** systems. New members got an invaluable head start by learning essential skills prior to the build season.





# TEAM NEUTRINO

## *Training Camps*



## TRAINING CAMPS 2024

Outreach Camp // June 10, 12, 14

Graphics Camp // June 17-19

CAD Camp // July 8-12

Programming Camp // July 16-19

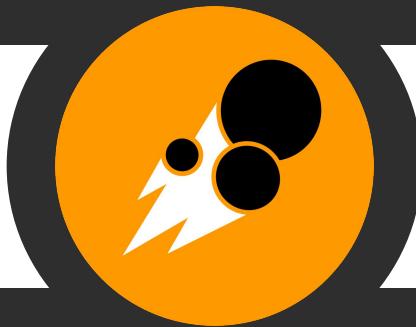
Electrical Camp // July 24-26

Website Camp // July 29 & 30

Awards Camp // August 5 & 6

Advanced Design Projects // June 17-21, July 22-26, August 5-9





# TEAM NEUTRINO

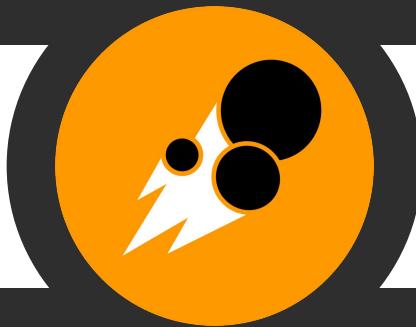
## Cow Town ThrowDown



## CTTD OFFSEASON COMPETITION

CowTown ThrowDown was a great opportunity to give new members their first look at how Team Neutrino competes at a competition, as well as refreshing returning members for the season ahead. Neutrino's mechanical and design teams were able to evaluate how to improve our design for 2025's game (durability, drivability, etc). Neutrino's scouting and strategy had a great time connecting with other teams as we extended our knowledge.





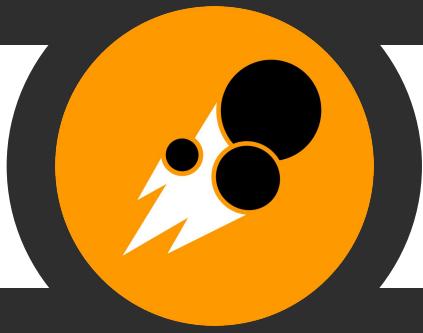
# TEAM NEUTRINO

## Mock Kickoff

### MOCK 2025 KICKOFF

To simulate how kickoff operates every January, Neutrino hosted a mock kickoff for all of its members and mentors. Using a mock FRC Game called Dunk Tank, new members were able to exercise skills acquired over summer learning sessions and prepare for the work to come in build season. This also gave members a chance to collaborate on designing and brainstorming for an FRC game, preparing them for kickoff on January 4th!



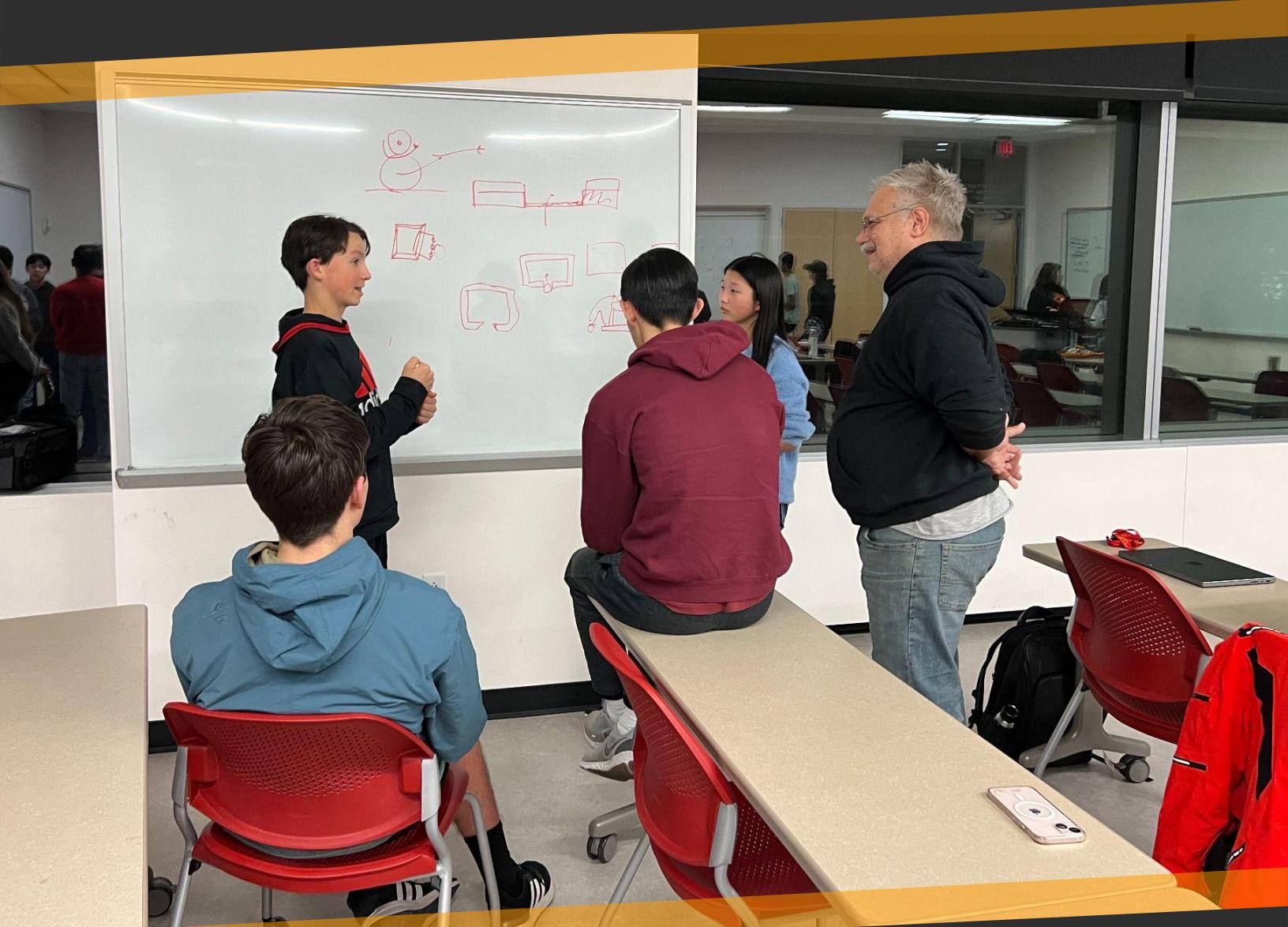


# TEAM NEUTRINO

## *Mock Monday Discussion*

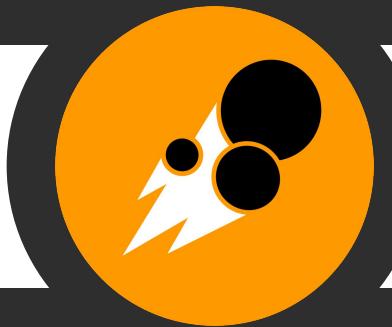
### MOCK 2025 MONDAY DISCUSSION

Following kickoff, Team Neutrino meets the next Monday afternoon to discuss design-specific ideas, integrations, and robot architecture. To simulate this process, the team organized a mock discussion, allowing new members to experience the pace of the conversation and gain confidence in contributing their ideas during actual Monday Discussion. Additionally, it provided an opportunity for all members to collaborate, think mechanically, and refine their robot design skills before the season officially begins.





**#3928 Team Neutrino  
BUILD SEASON 2025**



# TEAM NEUTRINO

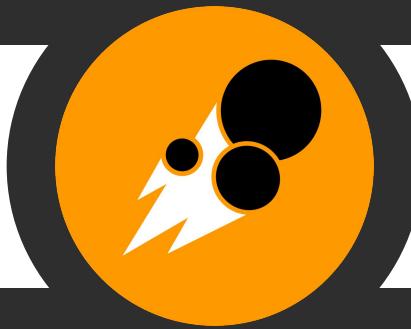
## *Kickoff*



## 2025 KICKOFF EVENT

Kickoff marks the start of the seven-week build season, when the team watches the live stream game announcement, reads the game manual and begins planning for the new FRC game (2025's Reefscape). This year we mapped out the Reefscape field, brainstormed robot archetypes as a group, and applied our new understanding of gameplay from the mock kickoff.





# TEAM NEUTRINO

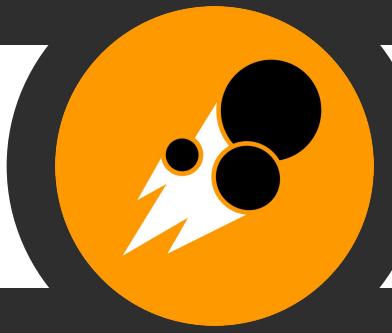
## *Subteams*



### SCOUTING SUBTEAM

Immediately after kickoff, the strategy team got to work simulating matches, discussing scoring strategies, and analyzing the Reefscape game manual and robot rules. The strategy/scouting team has developed an app-based scouting system to make scouring opposing robots more intuitive and efficient at regional competitions. This date will directly influence our pick list.





# TEAM NEUTRINO

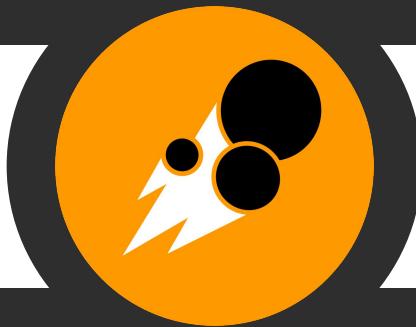
## *Subteams*



## PROTOTYPING SUBTEAM

Once our scouting team determines what our best route to success is with our given resources, prototyping tests and refines potential mechanism through prototyping before final production. Based on their findings, CAD begins to work on whatever archetype proves the most functional.





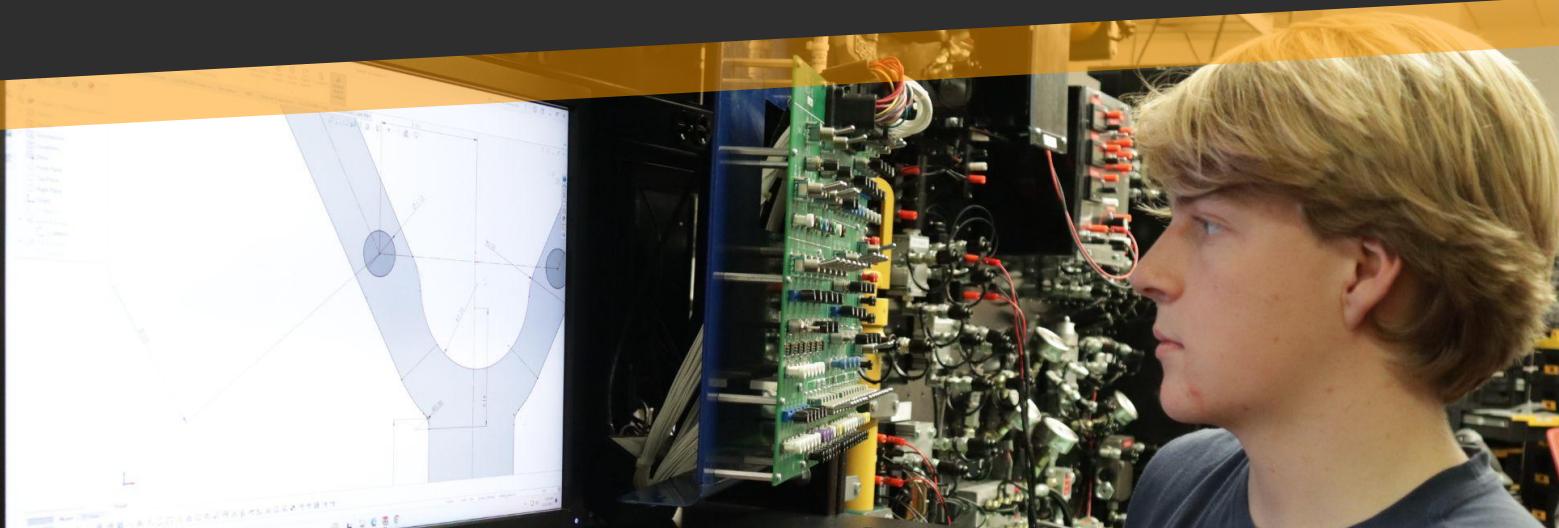
# TEAM NEUTRINO

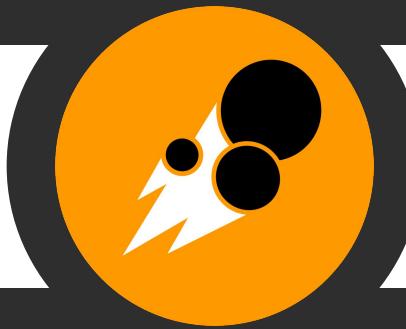
## *Subteams*



### CAD SUBTEAM

Students design this year's Reefscape robot in Solidworks, a 3D computer modeling program. Once our design is finalized by the prototyping team, the CAD team gets to work turning it into a manufacturable design and ensuring its geometry works (e.g. how it balances during endgame and what angle scoring should maneuver).





# TEAM NEUTRINO

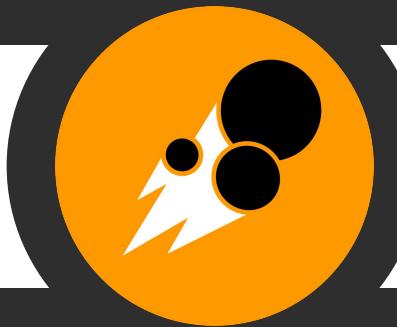
## Subteams



## MANUFACTURING SUBTEAM

After Team Neutrino's robot CAD is assembled and functioning, the subteam passes their files off to the manufacturing team to turn them into a reality. The team uses machines like their CNC machine and their Fortus 250MC 3D printer to manufacture custom parts. The subteam primarily works out of Iowa State University's Boyd Lab alongside several experienced ISU mentors.





# TEAM NEUTRINO

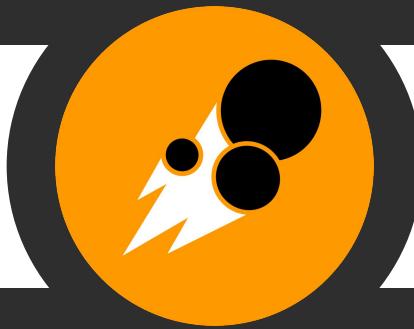
## *Subteams*



### ASSEMBLY SUBTEAM

With the completed set of robot parts in-hand (plus backups!) the assembly subteam works to produce a robot which is durable and full wired for competition use. Assembling the robot involves frequent testing, revising, and retesting throughout the entire process.





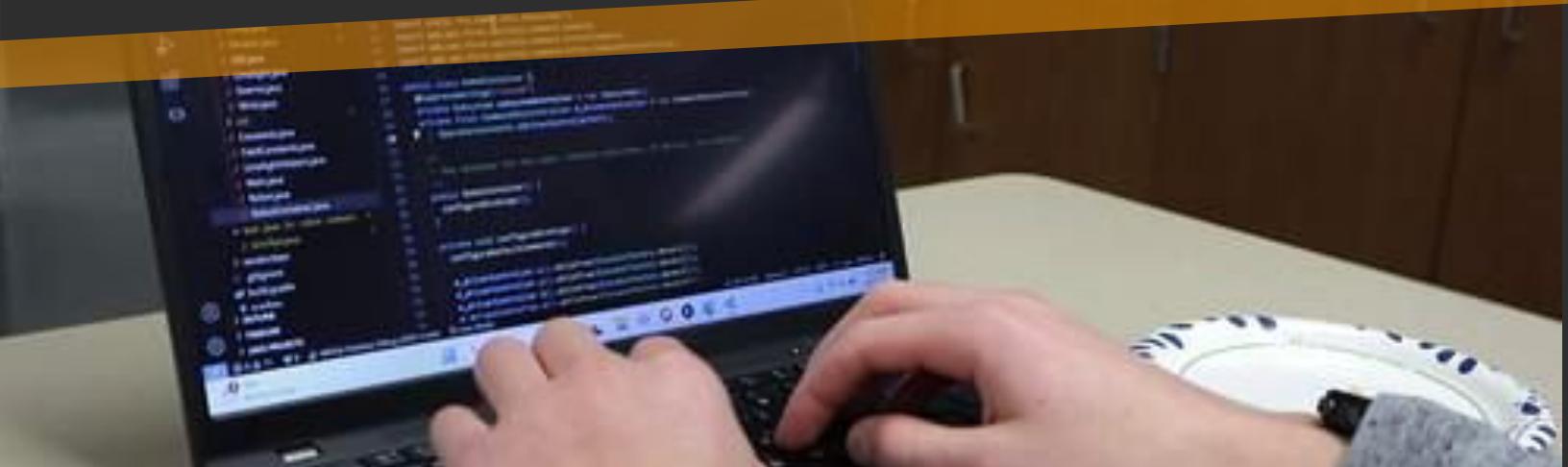
# TEAM NEUTRINO

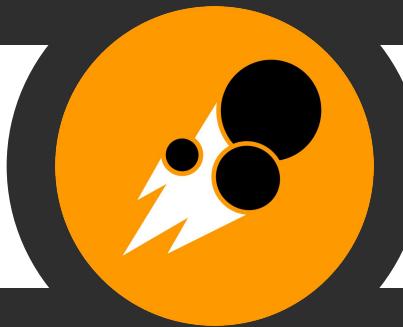
## *Subteams*



## CONTROLS SUBTEAM

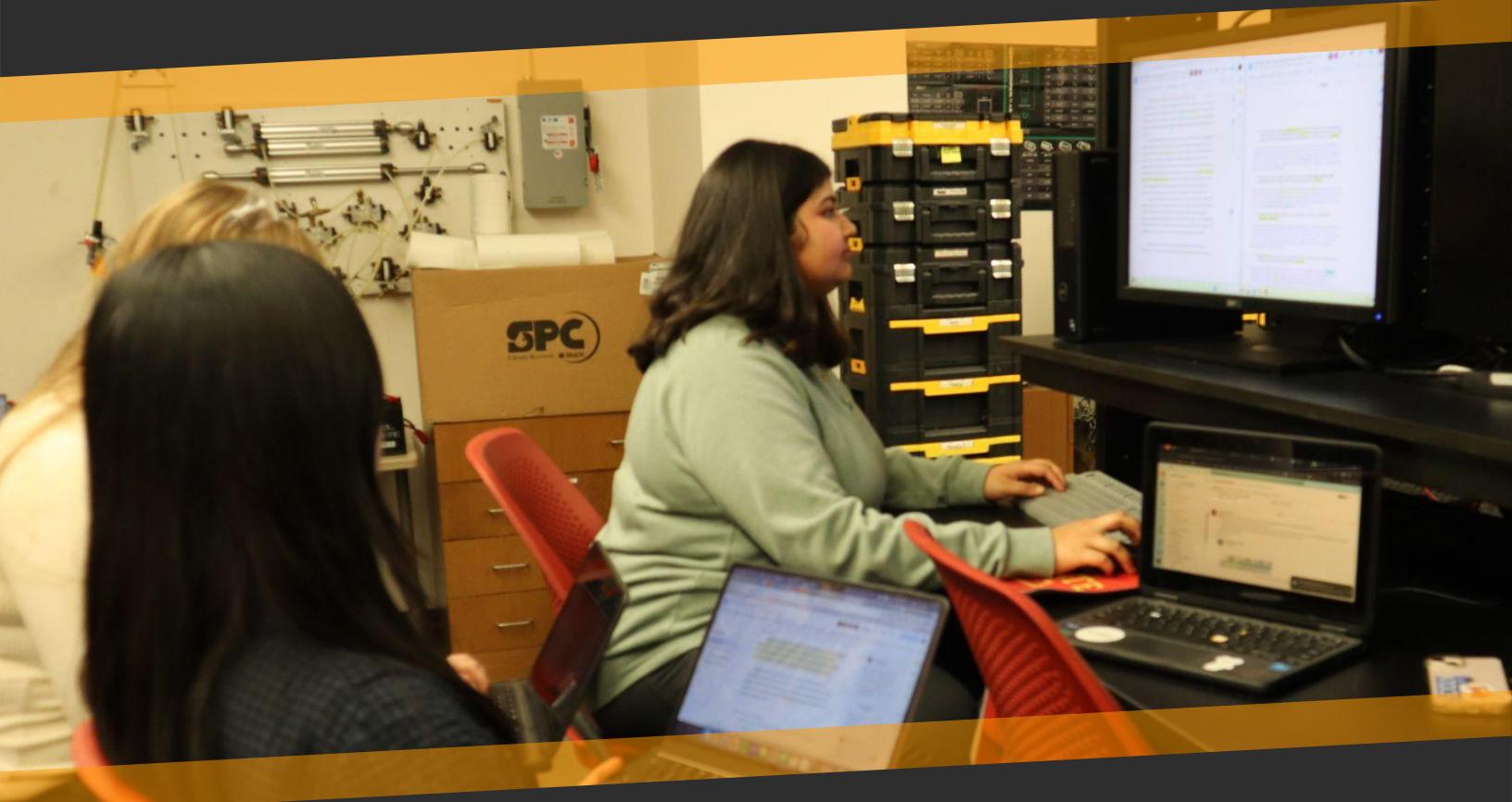
As Team Neutrino practiced driving this year's robot, the controls team was hard at work programming and testing our autonomous scoring ability. Beyond autonomous, controls assists in Java automated tasks such as our hub aiming, and ensures the robot's systems are tested and working smoothly by competitions.





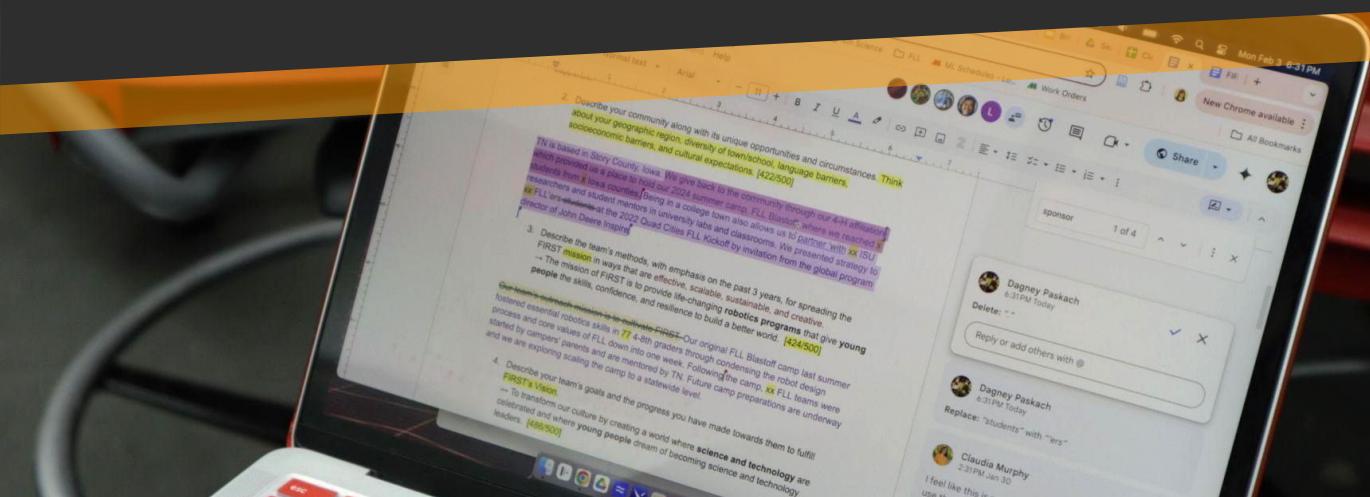
# TEAM NEUTRINO

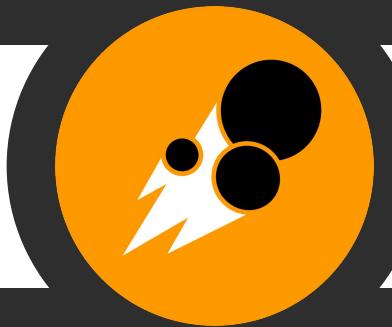
## Subteams



## AWARDS SUBTEAM

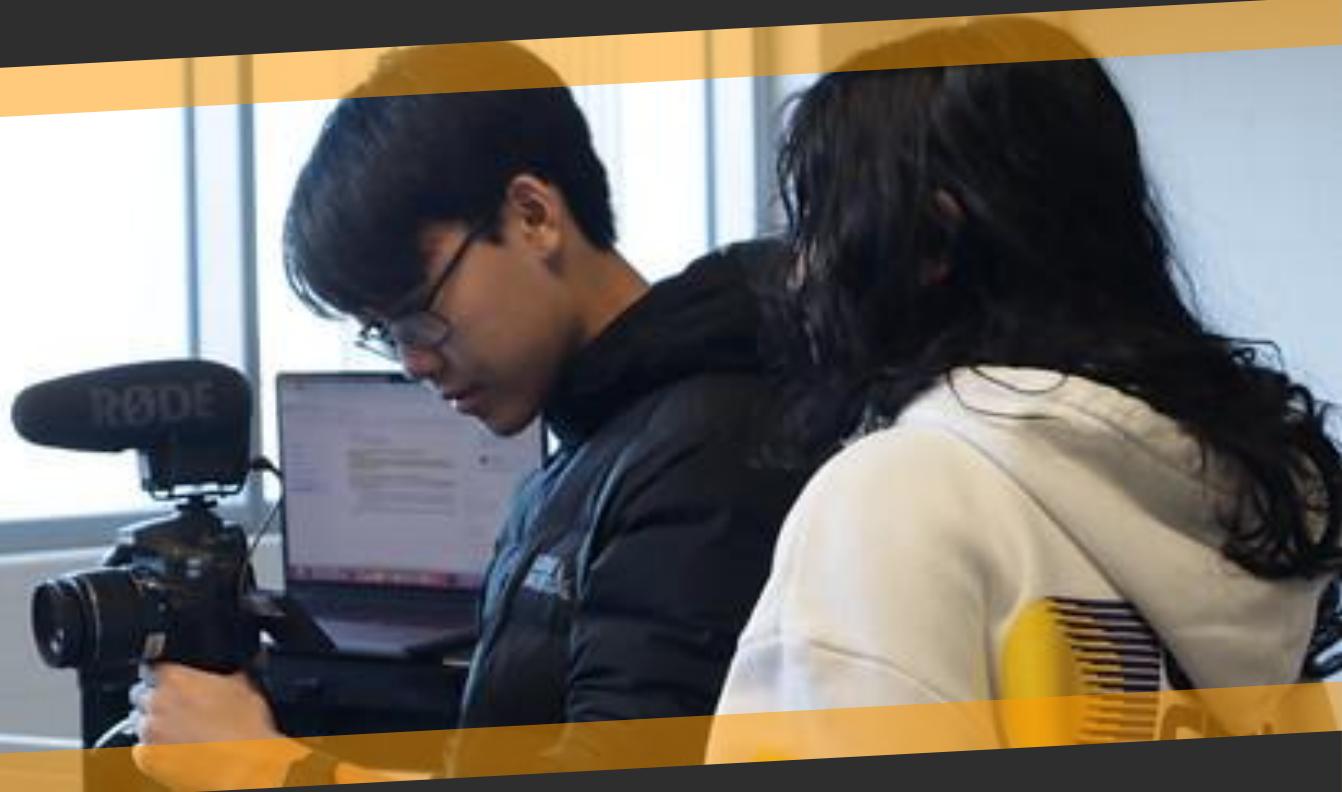
Beyond our competition robot, our Impact Award team is hard at work writing our essay submission and training underclassmen to give our awards presentation at regionals. The graphics team worked closely with the awards team to craft a complimentary video submission that highlighted our theme of inspiration.





# TEAM NEUTRINO

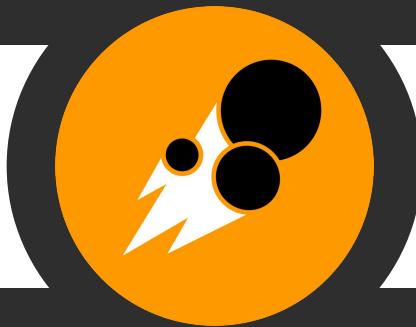
## *Subteams*



### GRAPHICS SUBTEAM

The Graphics subteam was responsible for upholding the team image through apparel, newsletters, printed materials, social media, website, and more. During the build and off seasons, the subteam met to take photos, upload photos, edit videos, manage the website, and curate newsletters.





# TEAM NEUTRINO

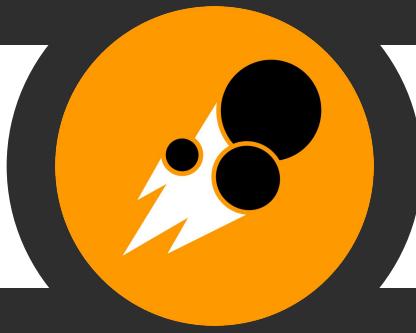
## Subteams



## FUNDRAISING SUBTEAM

The team as a whole would not be able to function or build a robot without the work of the fundraising subteam. This subteam is responsible for establishing and securing good connections with the team's sponsors in order to fund the team in everything that it does. The subteam also works to maintain these relationships through regular sponsor visits throughout the year as well as sending weekly newsletters giving updates on what the team is doing.





# TEAM NEUTRINO

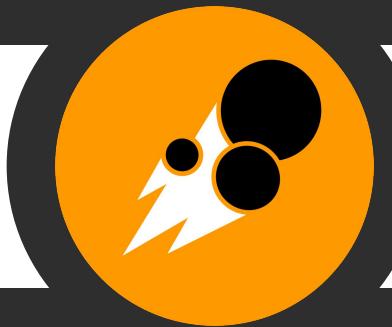
## Subteams



## OUTREACH SUBTEAM

Team Neutrino takes pride in its plethora of outreach events in the Story Country community (many of which are detailed later in this binder). The team behind them is constantly at work all year long establishing new connections where Neutrinos can create new events or volunteer for existing initiatives.





# TEAM NEUTRINO

## Robot Reveal



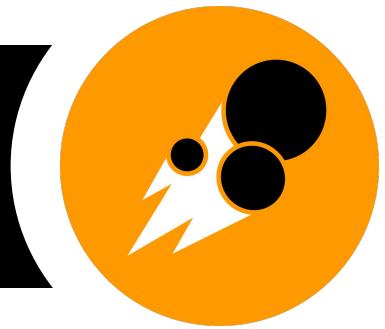
## 2025 ROBOT REVEAL

To end the 2025 build season, Neutrino hosted our annual “robot reveal” event, where Neutrino family, friends, and the community attended a demonstration of our robot. For the first time the public got a view of our robot, our game strategy, and a walkthrough of all the subteam work that went into making it possible. This event always motivates Team Neutrino and the community alike!



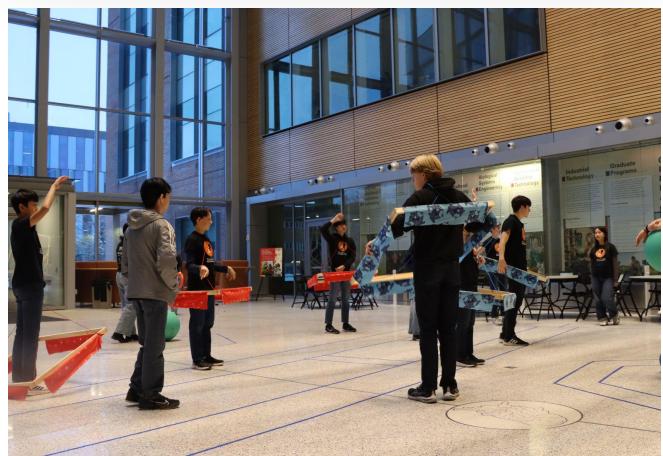


**#3928 Team Neutrino  
2025 Engineering Binder**



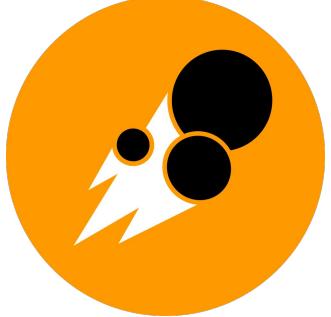
# TEAM NEUTRINO

## FIRST Robotics Team #3928



### **Kickoff engineering process**

- Evaluated game manual in small and large groups
- Strategized possible strategies in small and large groups
- Conducted field experiment to simulate gameplay and estimate cycle times
- Brainstormed robot archetypes and combinations of mechanisms
- Divided possible capabilities into a tiered “nice to have”, “want”, and “need” ranking (e.g. “need” remove algae vs “want” score L1 coral)

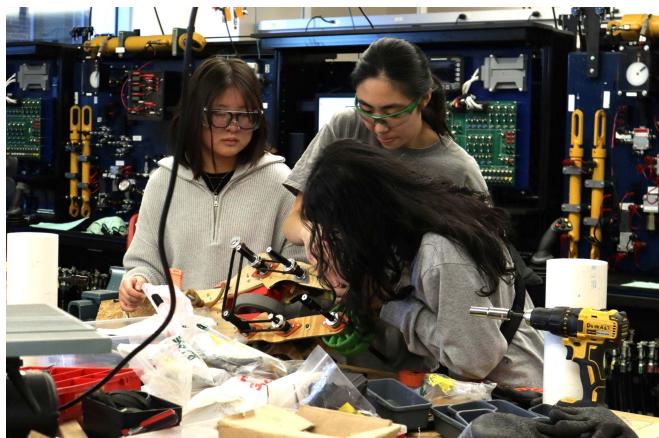
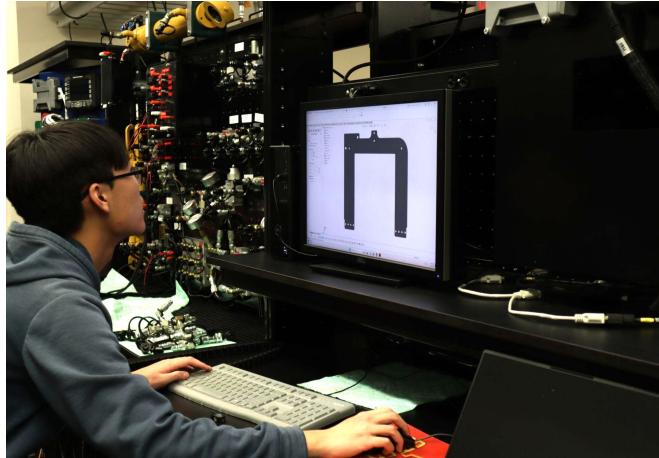


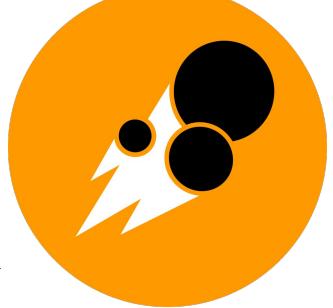
# TEAM NEUTRINO

*FIRST Robotics Team #3928*

## ***Prototyping mechanisms***

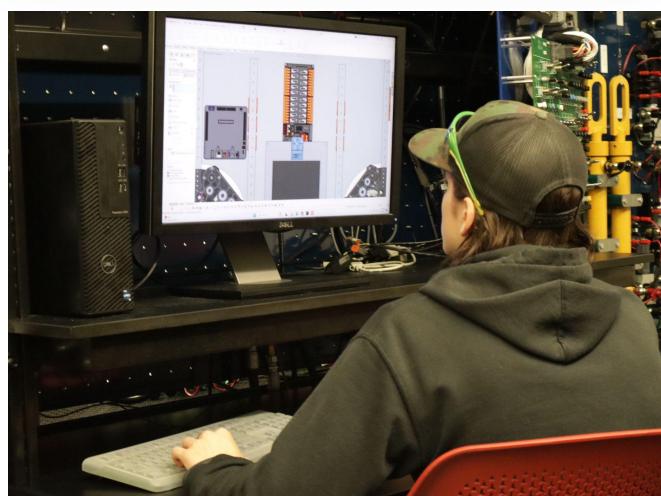
- **Intake** — Prototyped different over-the-bumper intakes to determine what best picks up coral and algae.
- **Scoring** — Constructed both side and top-bottom wheeled mechanisms out of wood to test effectiveness of different wheels, compression levels, and configurations.
- **Drivetrain** — Calculated max acceleration and velocity for gearboxes to optimize cycle times.
- **Climb** — Tested different designs to determine how to best grab onto the cage.





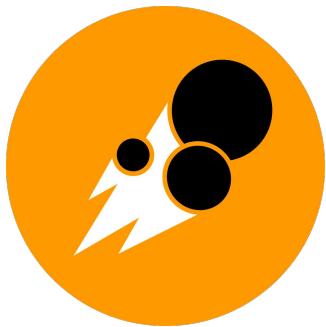
# TEAM NEUTRINO

## FIRST Robotics Team #3928



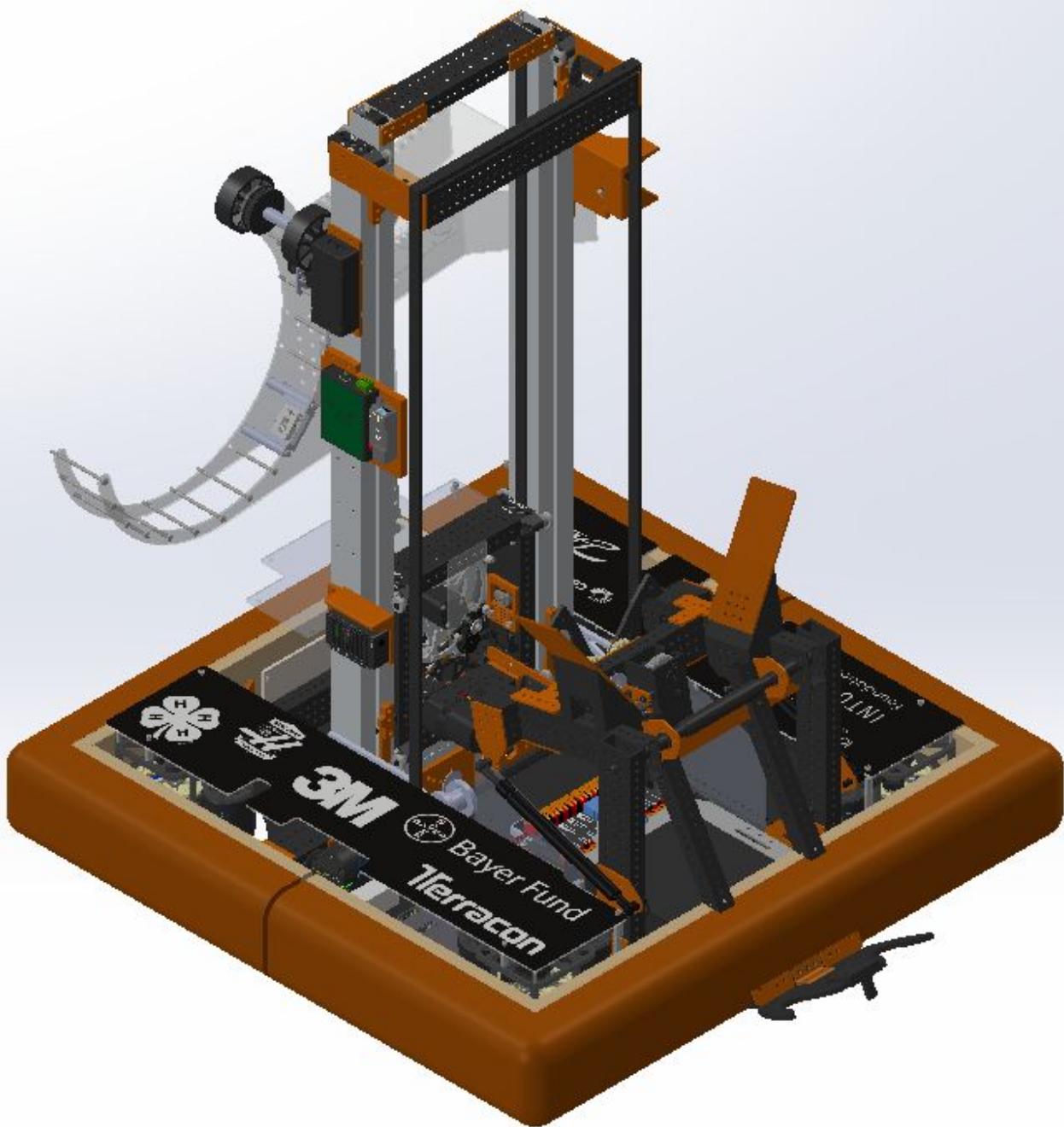
### ***CAD Design Process***

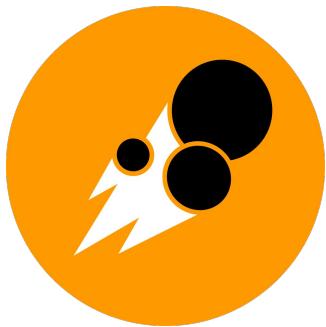
- We made a plan for each prototyped mechanism and the general idea of how it will look, and used various design calculators to figure out ideal speeds and gear ratios.
- We created master sketches for each mechanism and one for space claims on the final robot to avoid conflicts and proper geometry.
- We began to create parts that aligned with our findings from prototyping and fit within our overall layout of the robot.
- Manufacturing began on some mechanisms while others were still in the process of being CADDed.
- Assembly began once parts were completed and painted, using the CAD as a reference to make sure all placements were correct.



# TEAM NEUTRINO

*FIRST Robotics Team #3928*





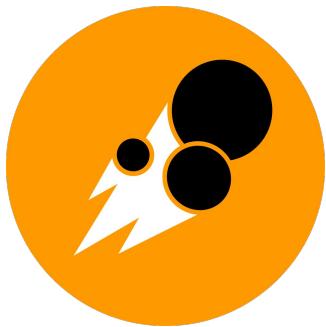
# TEAM NEUTRINO

**FIRST Robotics Team #3928**



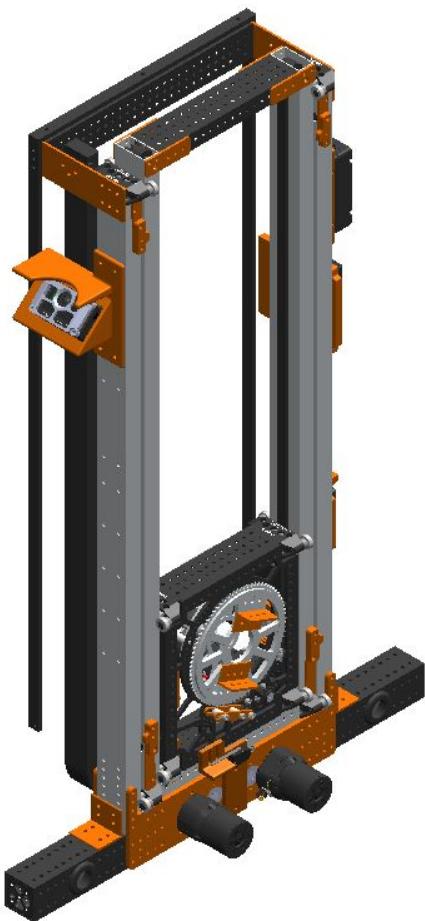
## ***Drivetrain Information***

- The Drivetrain contains a four wheel west-coast products Swerve X drive.
  - 4" Traction Tire Wheels, powered by 8 Krakens
    - 4 Krakens for turning
    - 4 Krakens for propulsion
  - It has a 15 ft/s free speed.
  - The frame perimeter is 29"x29".



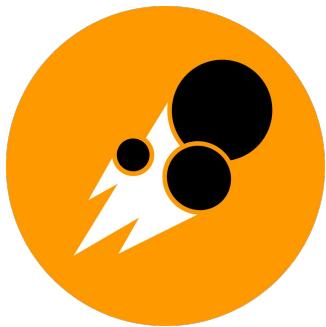
# TEAM NEUTRINO

*FIRST Robotics Team #3928*



## ***Elevator Information***

- The Elevator contains 2 NEO Vortexes
  - 2 stages
    - Max 70" from belly pan
    - Min 41" from belly pan



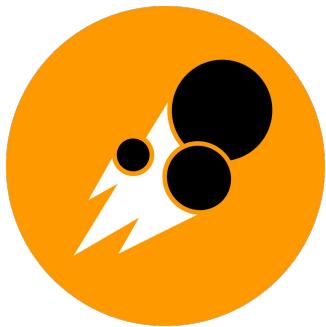
# TEAM NEUTRINO

*FIRST Robotics Team #3928*



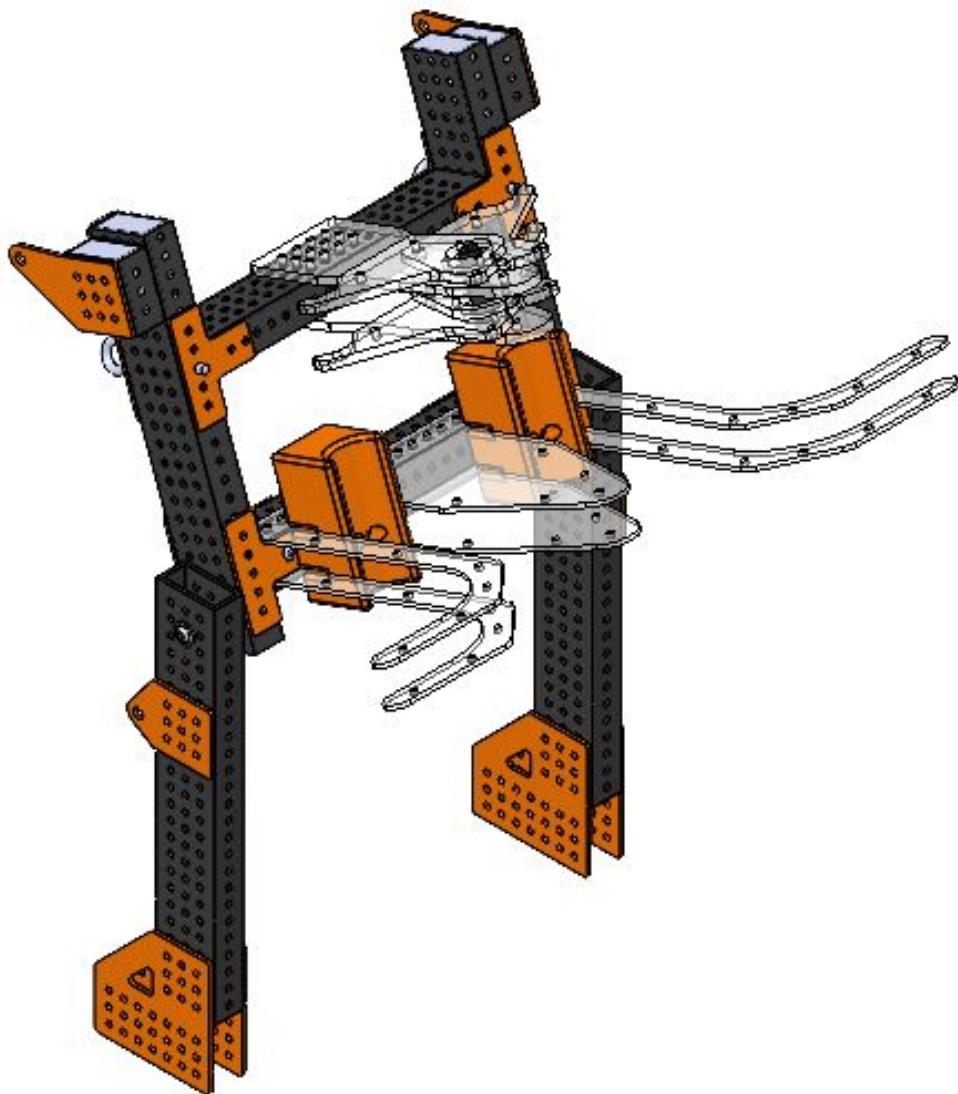
## ***Shooter/Intake***

- The **algae** intake consists of a 3" wheel design
  - It is powered by 1 NEO 550, geared down 8:1.
  - The algae is held between a set of 2 wheels and some polycarb to grip the algae securely
- The **coral** intake consists of a dual 1.5" roller design
  - It is powered by 1 NEO, geared down 2:1.
  - Deflector on the sides of the intake to guide notes toward center for the indexer.



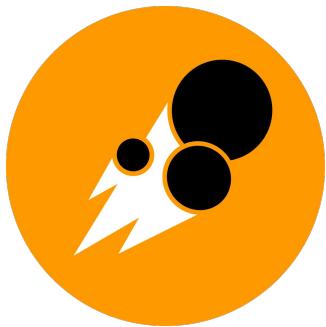
# TEAM NEUTRINO

*FIRST Robotics Team #3928*



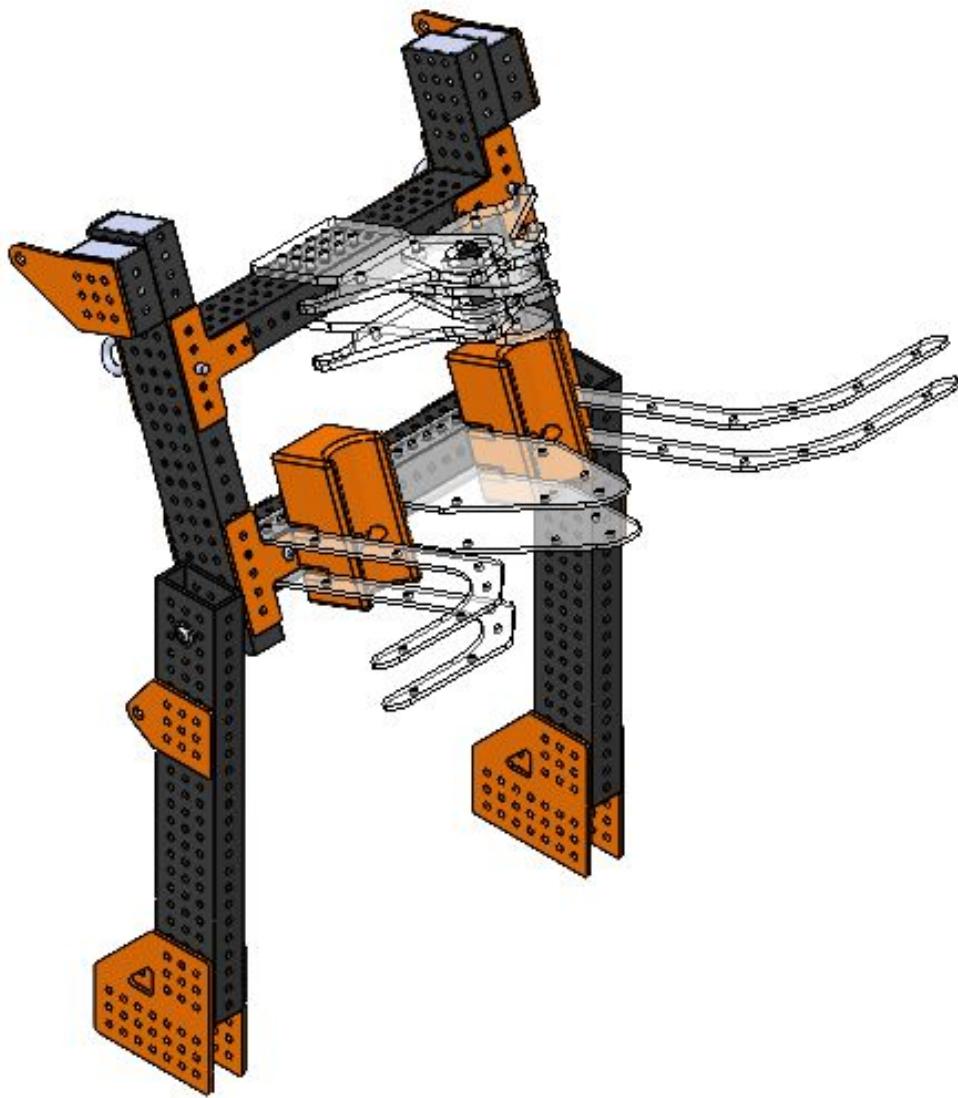
## ***Iowa Regional (New) Climb Information***

- The climb mechanism is an arm deployed by two 15 lb gas springs with a winch driven by two Krakens.
  - The hooks are passively actuated and the cage is aligned by a polycarbonate funnel
  - Friction material ensures the cage does not slip



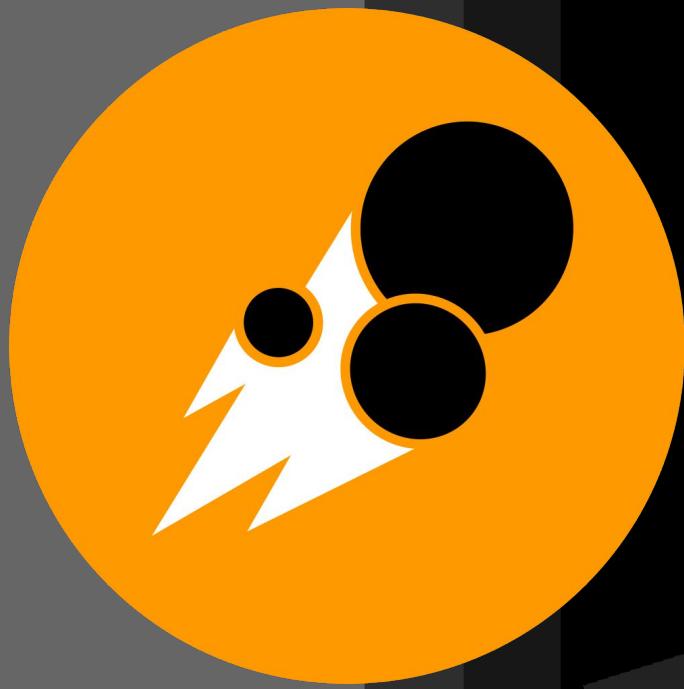
# TEAM NEUTRINO

*FIRST Robotics Team #3928*



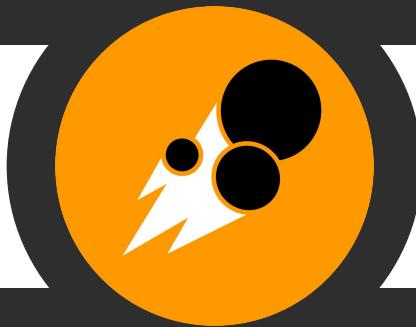
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  - The hooks are passively actuated and the cage is aligned by a polycarbonate funnel
  - Friction material ensures the cage does not slip



# #3928 Team Neutrino NEWSLETTERS





# TEAM NEUTRINO

## Newsletters



## TEAM NEUTRINO NEWSLETTERS

Throughout the year, Team Neutrino sends out newsletters to sponsors. Not only does this help maintain relationships with sponsors, but also keeps them updated on what the team has been up to. The Graphics subteam is responsible for writing, formatting, and choosing photos for each newsletter. These are sent out on a weekly basis during the build season, and also once every two months during the “offseason” to ensure relations year-round.

# TEAM NEUTRINO

## 2025 Week 1 Newsletter



### Kickoff

On January 4th, Team Neutrino got together to DIVE into the new FRC season: Reefscape! Members of the team got together to watch the official FIRST livestream of the game release and started brainstorming different strategies going forward. Using a life-sized replica of the field, team members reenacted drive cycles to find the most efficient ones.

### Monday Discussion

After Kickoff, the team met again the following Monday to recount what happened during Kickoff and discuss future plans, as well as robot architecture. Members then split up into different groups, helping to design potential intakes, scorers, and other mechanisms.

### Design

It's crunch time! Since the start of build season, the design subteam has been busy prototyping and CADing new ideas while testing out variables. Members have also been constructing rigs of different field elements such as a coral reef and a deep climb cage.

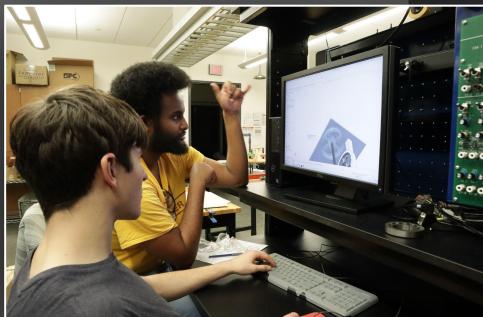
### Controls

While waiting for a completed robot plan, controls has been busy updating the 2024 code for the old robot, Valkyrie, and started discussing robot architecture. The subteam has also been working on smaller projects to prep for the future weeks.



# TEAM NEUTRINO

## 2025 Week 2 Newsletter



### Design

This week, design reached consensus and finalized the robot architecture. This enabled the subteam to get ahead on robot design, making amazing progress with CAD-ing subsystems and manufacturing parts for the scoring mechanism and drive train. Additional, swerve modules have been assembled for the controls subteam to begin wiring and one side of the practice field has been finished with the rest underway!

### Controls

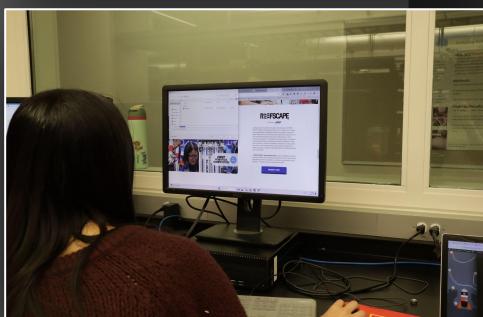
The controls subteam started programming skeletal code for the various subsystems that will be on the robot. While programming, they also began testing some code on test boards. Members also began setting up new Kraken motors for the swerve and climb mechanism and experimenting with the new April Tags on field pieces.

### Awards

Awards has been busy working on and revising the Impact Essay and reorganizing previous sections. They've also started discussing and brainstorming ideas on what to put on the Impact Presentation.

### Graphics

Since the start of build season, the graphics subteam has been busy with various tasks including writing newsletters, organizing photos/videos, working on printed materials, finalizing apparel orders, and creating social media posts. In addition, members continued to work and plan for the Impact Video.



# TEAM NEUTRINO

## 2025 Week 3 Newsletter



### Manufacturing/Prototyping

This week, Design team members continued to make excellent progress and started to manufacture the drivetrain and elevator components using a waterjet, lathe, and CNC. Additionally, students further developed and tested prototypes for scoring and intaking game pieces, iterating upon past prototypes to create efficient mechanisms.

### 4-H Volunteer of the Year Award

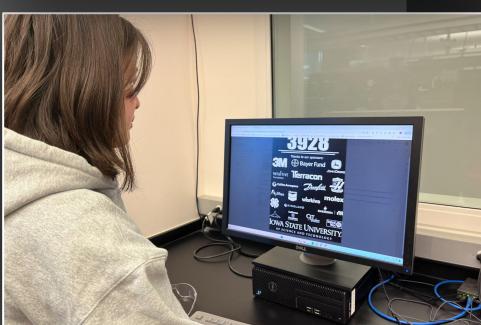
One of our team's mentors, Dagney Paskach, was nominated and won the Story County 4-H's Volunteer of the Year Award, allowing her to go on to compete against others at the state level! Dagney has contributed so much to the team and community and serves as an inspiration for all of our members. Members surprised her with a video and certificate at a team meeting!

### Impact Video Filming

Team members shot several shots this week for scenes in this year's Impact Video using equipment based on a script put together by a small group of students. The video, which will be submitted alongside the Impact Award, will embody the team's impact and history, as well as the challenges and successes we've had.

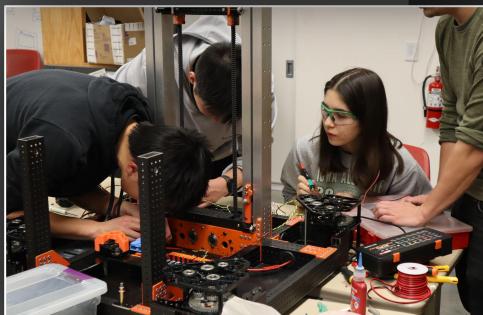
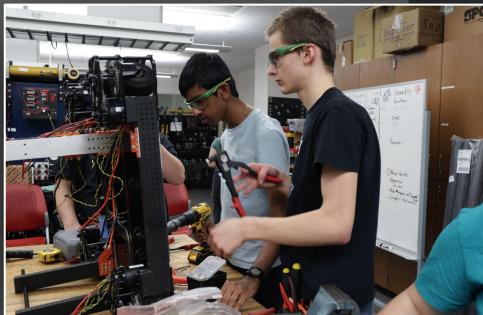
### Team Apparel

This week, the Graphics subteam wrapped up the team apparel order. Olivia, a freshman in the Graphics subteam, worked hard on creating a shirt back design that displays our sponsors and coordinating team apparel order forms, as well as putting together an email for the apparel order!



# TEAM NEUTRINO

## 2025 Week 4 Newsletter



### Assembly

After starting the production of the Drivetrain and Elevator parts last week, the Design Subteam has continued to make great progress on the assembly of the manufactured units! The team has now handed the robot to the Controls subteam to develop even further.

### Electrical Wiring

This week, the Controls subteam finally received the robot from Design and started to wire it. Members managed to begin wiring the elevator and drivetrain. This stage in the season consists of lots of fine tuning and collaboration amongst the two subteams in order to make the building of the robot go as best as it can!

### Awards

Over the past two weeks Awards finalized content for the presentation and worked on the personal stories/script. The subteam also prepared for the writing due date, went through the entire Executive Summary, went through the Impact Essay, and made revisions/updates.

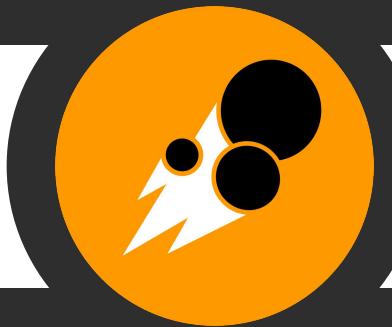
### Iowa FLL State Championship

On the 1st of February, Iowa State University hosted the Iowa FLL State Championship. Students from grades 4th to 8th have been preparing for the competition since the start of the school year, and participating teams from across the state competed. Congratulations to all the Team Neutrino-mentored teams that qualified for state!



#3928 Team Neutrino  
FLL BLASTOFF!





# TEAM NEUTRINO

## APL Summer Camp Fair

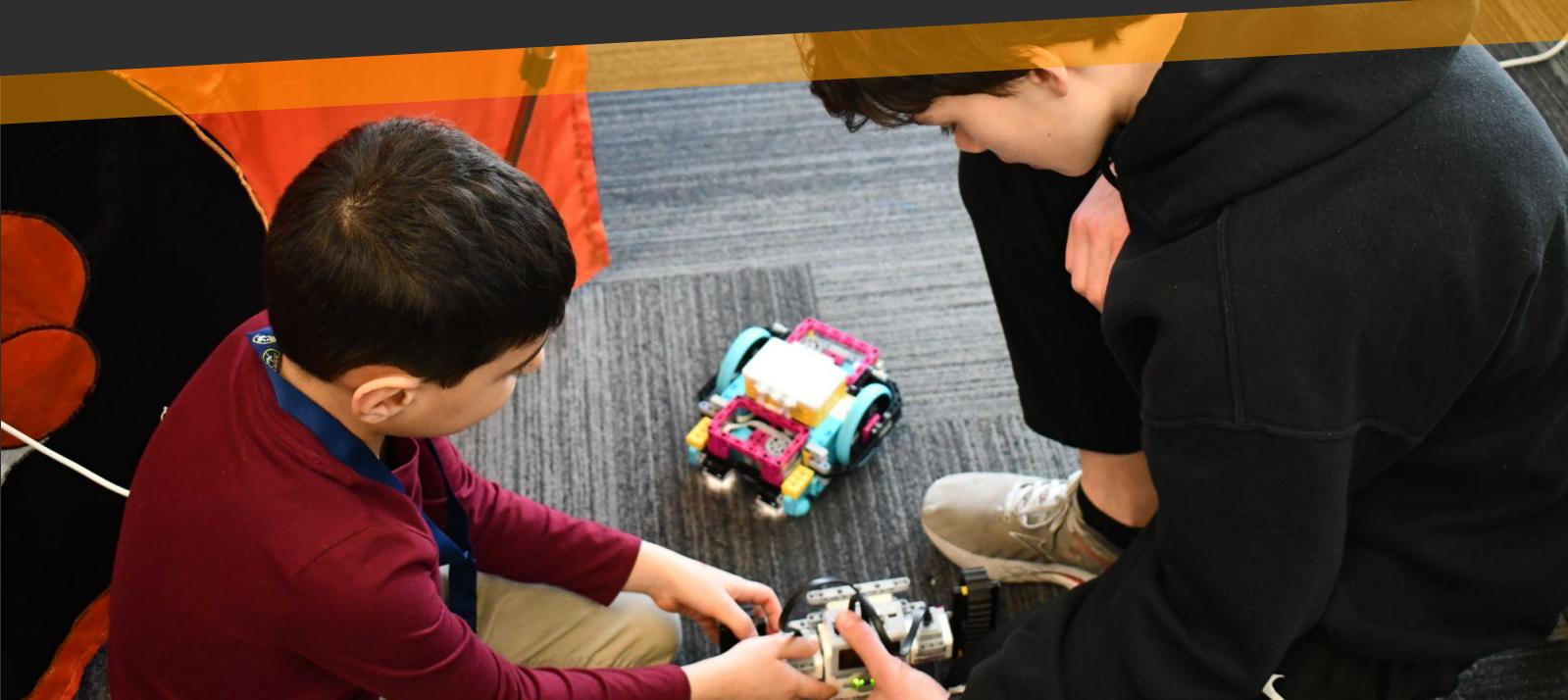
MARCH  
2024

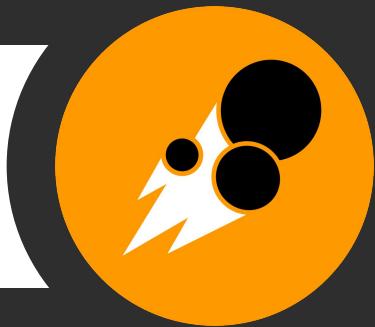
285 PEOPLE  
REACHED



## AMES PUBLIC LIBRARY SUMMER CAMP FAIR

Team Neutrino attended the Ames Public Library's Summer Camp Fair to advertise the first ever sessions of our "FLL Blastoff!" summer camp. We demonstrated previous FLL robots and games during our presentation. Many kids and parents expressed interest in FLL Blastoff and were excited to learn more!





# TEAM NEUTRINO

## Farmers Market for FLL Blastoff

MAY 2024

135 PEOPLE  
REACHED



## FARMERS MARKET FOR FLL BLASTOFF

Team Neutrino members attended Ames' local Farmers Market with Iowa State University Extension and Outreach to promote our upcoming summer program: FLL Blastoff! Through this event, we were able to spread the word about our camp and engage with the community about FLL and STEM.





# TEAM NEUTRINO

## *School Visits for FLL Blastoff*

**MAY 2024**

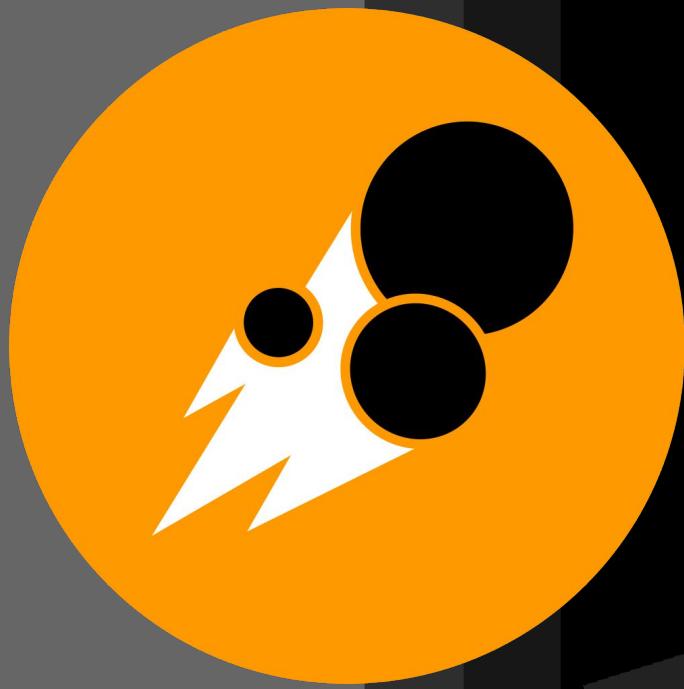
**229**  
**PEOPLE**  
**REACHED**



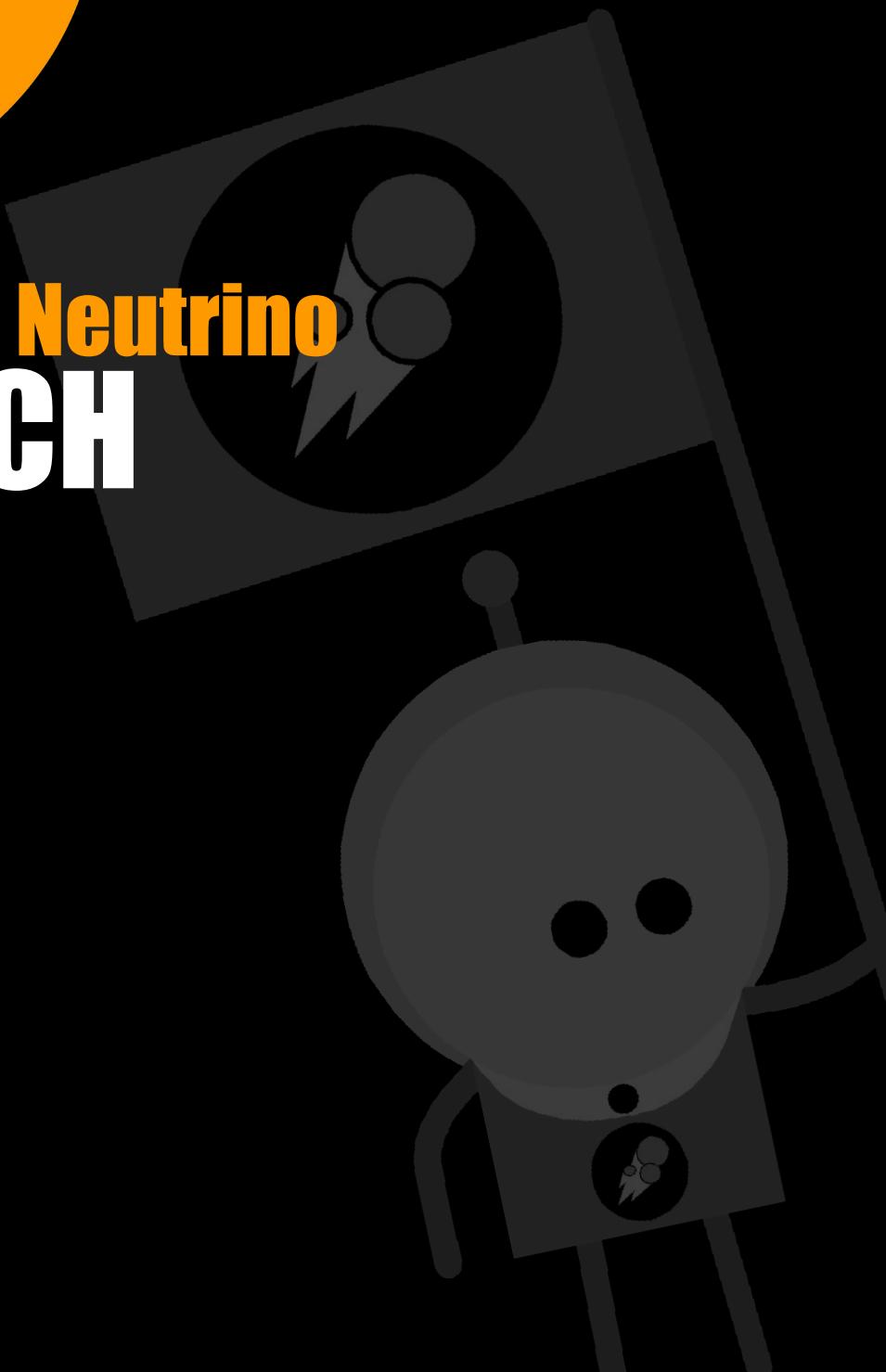
## **SCHOOL VISITS FOR FLL BLASTOFF**

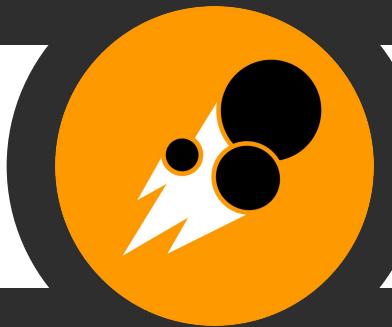
Members from the outreach subteam organized visits to various elementary and middle schools in the district to promote our upcoming FLL summer camp: FLL Blastoff! The primary focus of the visit was to encourage younger students in the area to sign up and get involved with the program. The visits were very successful, and they were able to introduce over 200 elementary and middle schoolers` to STEM and FLL.





# #3928 Team Neutrino OUTREACH





# TEAM NEUTRINO

## *Mitchell & Edwards STEAM Night*

**MARCH  
2024**

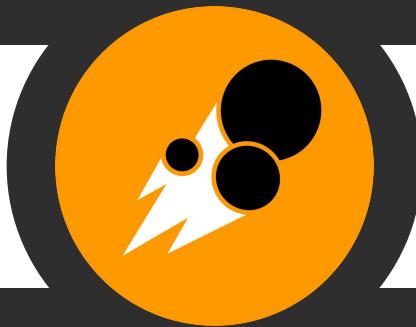
**20 PEOPLE  
REACHED**



## **MITCHELL & EDWARDS STEAM NIGHT**

Team Neutrino members set up a stand at the annual Mitchell & Edwards STEAM Night. Members had fun demonstrating various snap circuit models and interacted with elementary schoolers. We handed out informational pamphlets and were able to introduce many parents and kids to FIRST and FLL Blastoff!





# TEAM NEUTRINO

## CelebrAsian

MAY 2024

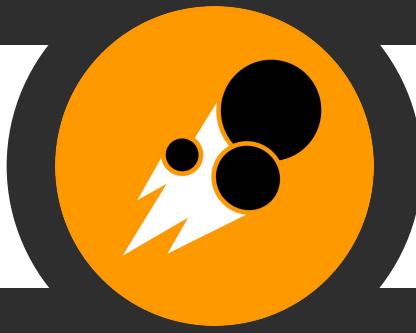
276 PEOPLE  
REACHED



## CELEBRASIAN

During CelebrAsian, a multicultural festival organized by the Iowa Asian Alliance, the team showcased the robot and interacted with community members. This event, for the third year running, was a great success, and we gathered valuable feedback and insights from the attendees. This event helped us improve the robot's capabilities and functionality for the future.





# TEAM NEUTRINO

## Golden K Kiwanis Club

JUNE 2024

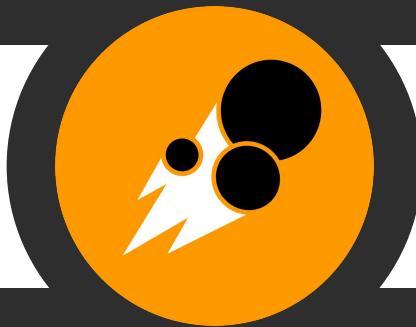
30 PEOPLE  
REACHED



## GOLDEN K KIWANIS CLUB

Presenting and showcasing the robot at the Golden K Kiwanis Club allowed Team Neutrino to interact with the Kiwanis and maintain relations with them. After an in-depth presentation, the team was able to answer many questions regarding Team Neutrino, our robot, and the design process.





# TEAM NEUTRINO

*Enrich, Empower, Excel*

JULY 2024

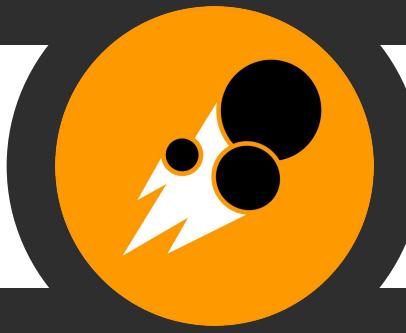
110 PEOPLE  
REACHED



## ENRICH, EMPOWER, EXCEL SUMMER CAMP

Enrich, Empower, and Excel (EEE) is a summer program open to any Ames Community School District student. The EEE summer camp offers a variety of classes intended to keep students in the world of STEM in the summer. As mentors for some of these summer camps, Team Neutrino sought to inspire and motivate students to explore and pursue STEM fields by sharing their knowledge and passion for science, technology, engineering, and mathematics.





# TEAM NEUTRINO

## 4th of July Parade

JULY 2024

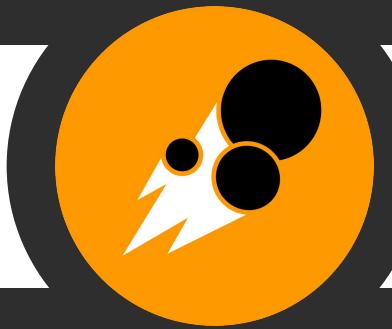
8,000+  
PEOPLE  
REACHED



## CITY OF AMES 4TH OF JULY PARADE

Team Neutrino was proud to march in the 2024 4th of July Parade, hosted by the City of Ames. The community was thrilled to be at the event, and Neutrino was excited to show off last season's robot. There was a high attendance and many team members were able to talk with parents about FIRST.





# TEAM NEUTRINO

## Story County Fair

JULY 2024

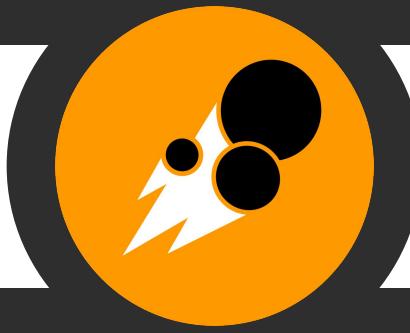
100  
PEOPLE  
REACHED



## STORY COUNTY FAIR

Our team volunteered to supervise an exhibit hall at our county's fair and supported the dinner rush at a nearby booth. While supervising members were able to share about Team Neutrino, FRC, and other FIRST programs. This was a great way to spread the word about our team and FIRST to members of our community.





# TEAM NEUTRINO

## *SCI Camps Presentation*

**AUGUST  
2024**

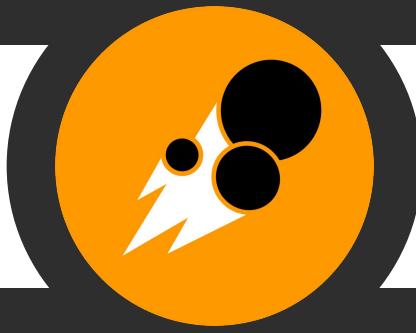
**35 PEOPLE  
REACHED**



## **SCI CAMPS PRESENTATION**

A few team members visited a local science center, where a STEM camp for female students was taking place. During the camp, we gave a presentation about our team, brought interactive control boards, and set up FLL Challenge mats for students to test their programming skills.





# TEAM NEUTRINO

## *Iowa State Fair STEM Day*

AUGUST  
2024

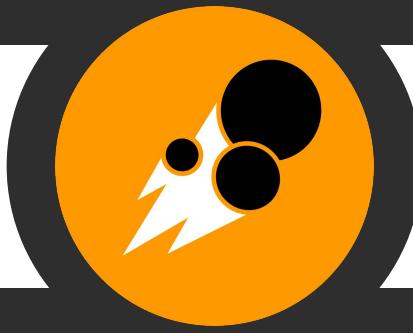
530 PEOPLE  
REACHED



## STEM DAY AT IOWA STATE FAIR

During STEM Day at the Iowa State Fair, Team Neutrino set up a booth in the 4-H building, volunteered for Blue Origin's outreach table with the Governor's STEM Council, and demonstrated the robot with other FRC teams. Neutrinos taught kids about STEM and told parents all about various FIRST programs.





# TEAM NEUTRINO

## Sawyer Back to School Night

AUGUST  
2024

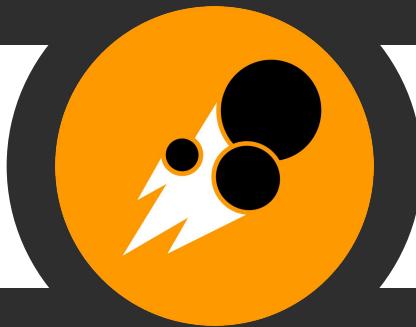
26 PEOPLE  
REACHED



## SAWYER BACK-TO-SCHOOL NIGHT

We engaged with local elementary school students and their parents to promote FLL Explore by demonstrating an interactive robot activity. This proved to be very effective, as over 20 students expressed interest and applied to our FLL Explore team.





# TEAM NEUTRINO

## *Edwards Back to School Night*

AUGUST  
2024

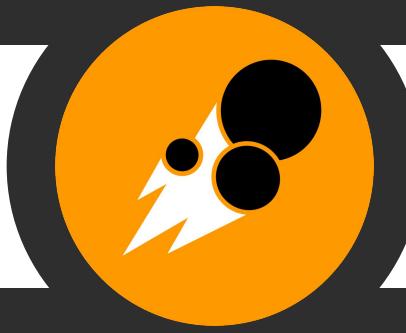
41 PEOPLE  
REACHED



## EDWARDS BACK-TO-SCHOOL NIGHT

Our interactive robot activity proved to be a great success, with over 20 students trying out for our FLL Explore team. Through this demonstration, we engaged with local elementary students and their parents, introducing them to FLL Explore and encouraging participation.





# TEAM NEUTRINO

## AMS FLL Training

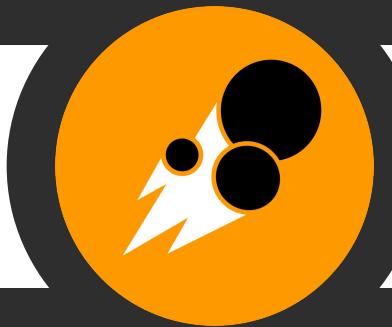
**AUGUST  
2024**

**46 PEOPLE  
REACHED**



## AMES MIDDLE SCHOOL FLL TRAINING

Team Neutrino members volunteered to help teach middle school FLL members how to program the LEGO SPIKE Prime robots. They also volunteered as judges for the tryouts and helped younger kids discover their hobbies with problem solving and creative thinking, allowing the team to stay involved within all levels of the FIRST community.



# TEAM NEUTRINO

## *Robotics Day at SCI*

**SEPTEMBER  
2024**

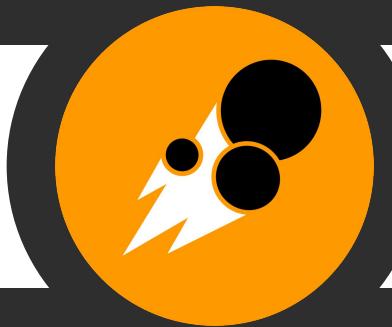
**290 PEOPLE  
REACHED**



## **ROBOTICS DAY AT SCIENCE CENTER OF IOWA**

At the Science Center of Iowa's Robotics Day, Neutrinos were able to showcase the robot with a demonstration in an interactive way. We also hosted a booth displaying information regarding our team and offered STEM-related activities for the crowd.



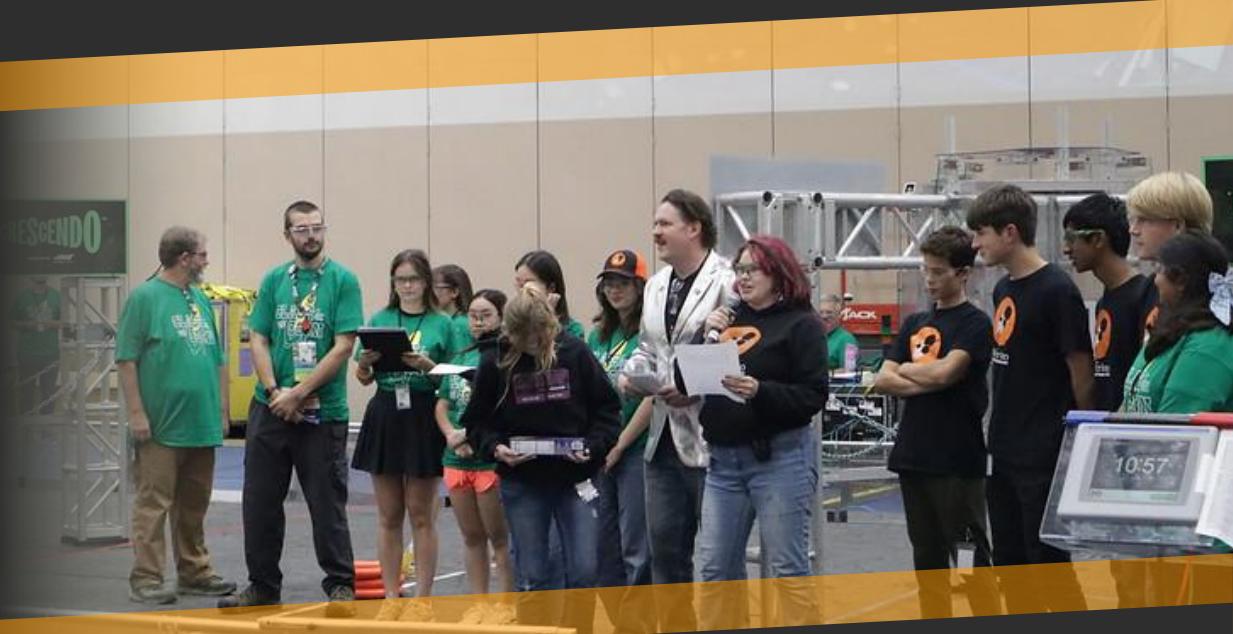


# TEAM NEUTRINO

## *Clash In The Corn*

**SEPTEMBER  
2024**

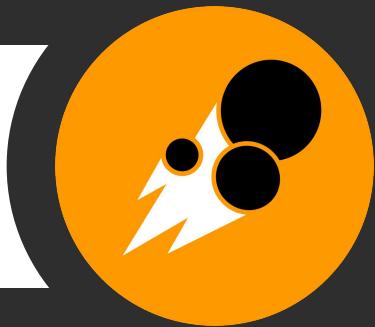
**250 PEOPLE  
REACHED**



## **CLASH IN THE CORN**

Hosted by team 6419 ICE in Des Moines, our team volunteered at and helped run the inaugural, first ever FRC off-season competition in Iowa. At this event, members and mentors took on roles such as being announcers, referees, queuers, taking photos for the event, running the concession stand, and preparing food for hardworking volunteers.





# TEAM NEUTRINO

## ITEC Conference

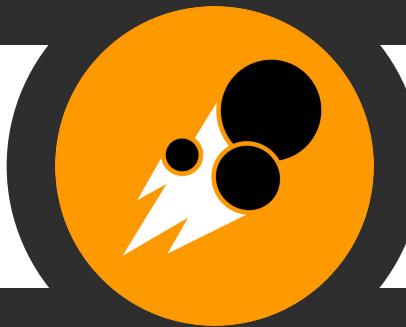
OCTOBER  
2024

45 PEOPLE  
REACHED



## ITEC CONFERENCE

Our team presented at the ITEC Conference, sharing ways to integrate STEM into the classroom to teachers and educators. Our outreach team prepared a presentation about our team and FIRST programs. Members were able to answer lots of questions from teachers. Many of the teachers showed interest in FIRST programs. Grace, one of our members, was awarded the 2024 Sypersma Leadership & Innovation Award, for her work with Team Neutrino and STEM outreach. Grace was the first ever student to receive this award!



# TEAM NEUTRINO

## Sawyer STEM Night

NOVEMBER  
2024

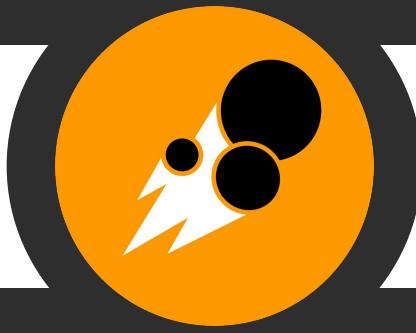
33 PEOPLE  
REACHED



## SAWYER STEM NIGHT

Team Neutrino members set up a stand at the annual Sawyer Elementary School STEM Night. Members demonstrated various snap circuit models and interacted with elementary schoolers. Team Neutrino was able to introduce many parents and kids to FIRST while handing out informational pamphlets!





# TEAM NEUTRINO

## *Fellows Science Night*

**FEBRUARY  
2025**

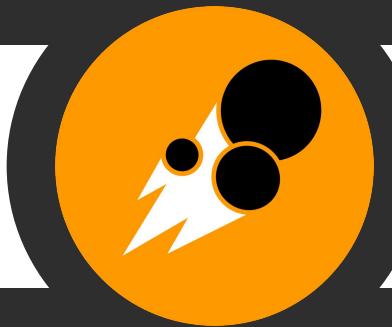
**70 PEOPLE  
REACHED**



## **FELLOWS SCIENCE NIGHT**

Team Neutrino members set up a stand at Fellows Elementary School STEM Night. Members demonstrated various snap circuit models and interacted with elementary schoolers. Team Neutrino was able to introduce many parents and kids to FIRST while handing out informational pamphlets!





# TEAM NEUTRINO

## 4-H Legacy Awards Gala

FEBRUARY  
2025

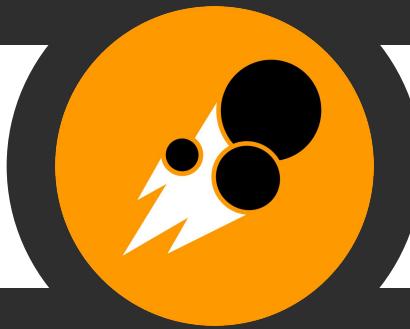
300 PEOPLE  
REACHED



## 4-H LEGACY AWARDS GALA

Team Neutrino members attended the 4-H Legacy Awards Gala to celebrate member Meabh's recognition as the 2025 Contributing Youth Award recipient. The event honored outstanding 4-H members, and we were privileged to showcase our robot to various audiences and distinguished community members.





# TEAM NEUTRINO

## *Frozen Fiesta*

**FEBRUARY  
2025**

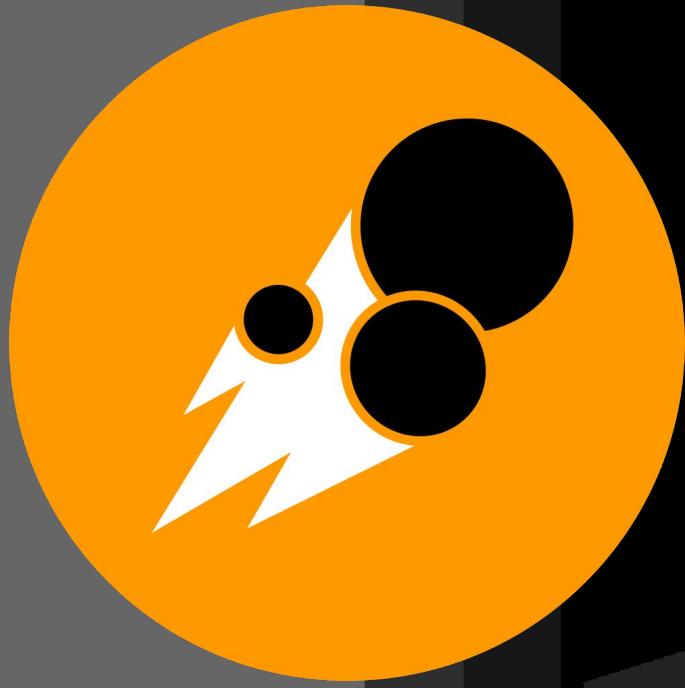
**12 PEOPLE  
REACHED**



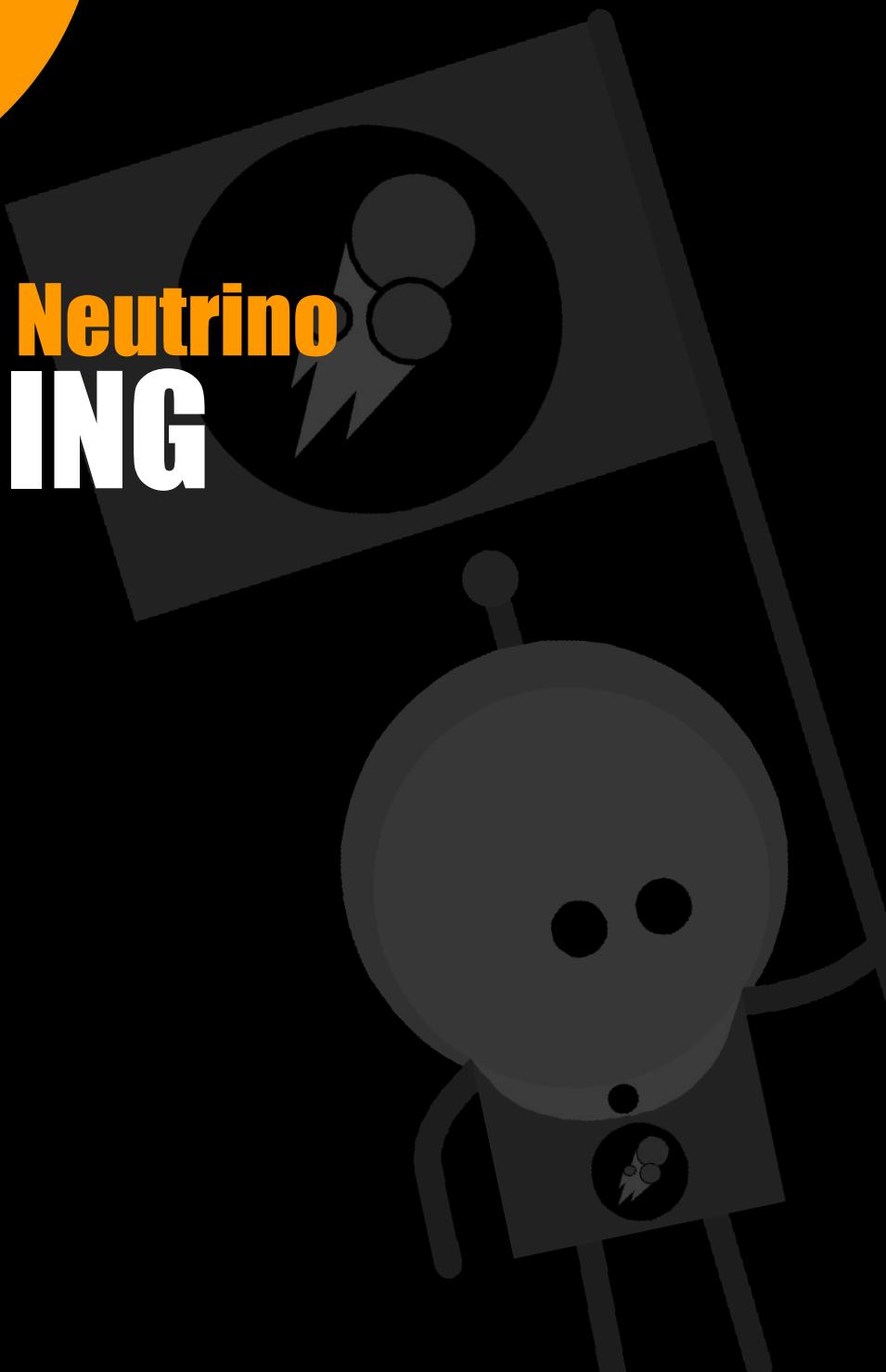
## **FROZEN FIESTA**

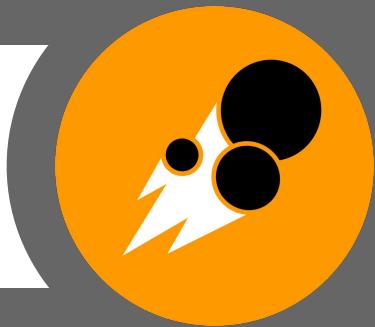
Several Team Neutrino members attended the Frozen Fiesta scrimmage hosted by FRC Team 6419! This event allowed us to gain valuable experience testing and driving the robot on a full-sized field while refining the autonomous code. Additionally, members participated in a non-tech meeting and an Impact Award exchange, providing awards team members with the opportunity to practice presenting and share insights with other teams.





# #3928 Team Neutrino MENTORING





# TEAM NEUTRINO

## Mentored Teams



**19379**

### Octopuses or Octopodes

#### Ames Middle School Purple

Mentors - Grace, Morgan

Rising All-Star Award  
State Advancing Award



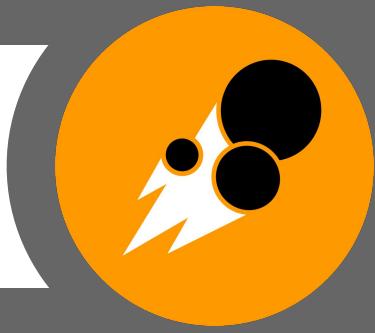
**27662**

### Scuba Diving Chickens

#### Ames Middle School Red

Mentors - Chetas, Fyona, Sarah

**FLL CHALLENGE**  
**TEAMS**



# TEAM NEUTRINO

## Mentored Teams



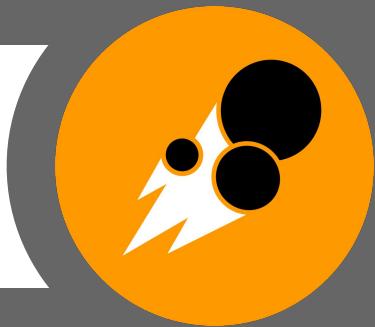
**Curious Banana Seal  
Surfers**  
**Ames Middle School Blue**  
Mentors - Amaya, Anirudh,  
Mick

State Advancing Award  
State Coach/Mentor Award



**Gasoline Beavers**  
**Ames Middle School Green**  
Mentors - Allen, Siwon,  
William, Laura

**FLL CHALLENGE  
TEAMS**



# TEAM NEUTRINO

*Mentored Teams*



**LEGO Dinos**  
**Danielson Community**  
Mentors - Morgan

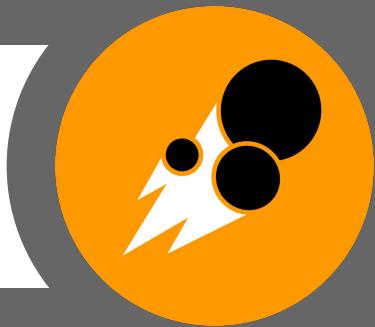
State Advancing Award  
Grace Murray Hopper Award



**Nautilus**  
**Story County 4-H**  
Mentors - Vienna, Yehang

Rising All-Star Award

**FLL CHALLENGE**  
**TEAMS**



# TEAM NEUTRINO

## Mentored Teams



**Happy Little Dinosaurs  
With Happy Little Hats**  
**Sawyer Elementary**  
Mentors - Subaita

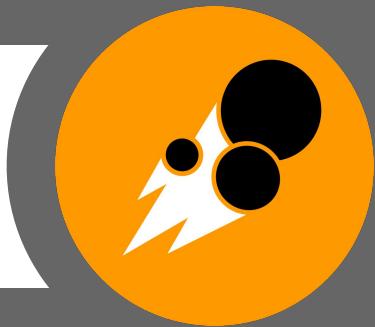


**SeaSearch**  
**Fellows Elementary**  
Mentors - Rayn



**The Krakens**  
**Meeker Elementary**  
Mentors - Adam, Laura

**FLL CHALLENGE  
TEAMS**



# TEAM NEUTRINO

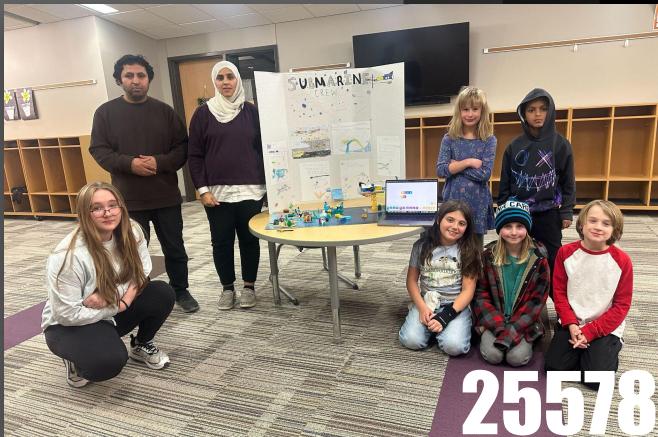
*Mentored Teams*



## The ISU Underwater Gars

**Edwards Elementary**

Mentors - Hanna, Olivia, Joel

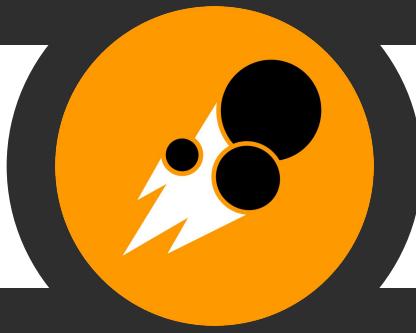


## Submarine Crew

**Meeker Elementary**

Mentors - Lily, Lauren, Shreya

**FLL EXPLORE  
TEAMS**



# TEAM NEUTRINO

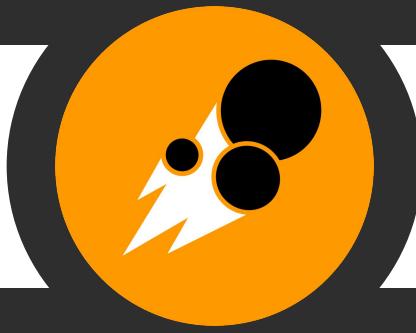
## Ames FLL Scrimmage



## AMES FLL SCRIMMAGE

The Ames FLL Scrimmage took place at Ames Middle School, providing an opportunity for our students to reconnect with the teams they mentored during the past FLL season. This year, we saw our largest turnout yet, with 10 teams participating and 35 volunteers from Team Neutrino. These FLL teams play a crucial role in introducing middle school students to high school FIRST, making them an invaluable source of exposure to the program.





# TEAM NEUTRINO

## *Iowa FLL State Championship*



## IOWA FLL STATE CHAMPIONSHIP

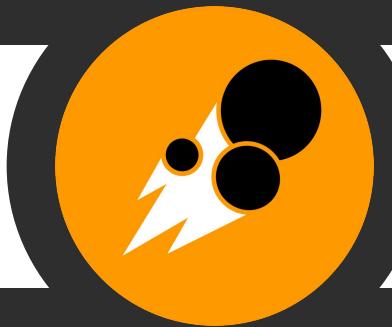
During the Iowa FLL State Championship, Team Neutrino members mentored teams and aided them in efforts to cooperate during matches, as well as present for judges to win awards. Team members also volunteered at this event, and it was a great way to stay involved within the FIRST community!





# #3928 Team Neutrino SPONSOR VISITS





# TEAM NEUTRINO

## REG Sponsor Visit

JUNE 2024

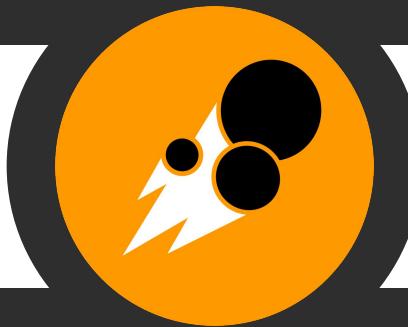
11 PEOPLE  
REACHED



## REG SPONSOR VISIT

Neutrino visited one of our sponsors, REG, to present about our past season and our team accomplishments. At this meeting, we demonstrated our team to both a room of employees and an online zoom call. This visit was a great meeting with a recurring sponsor, and allowed the team to sustain our relationship with REG.



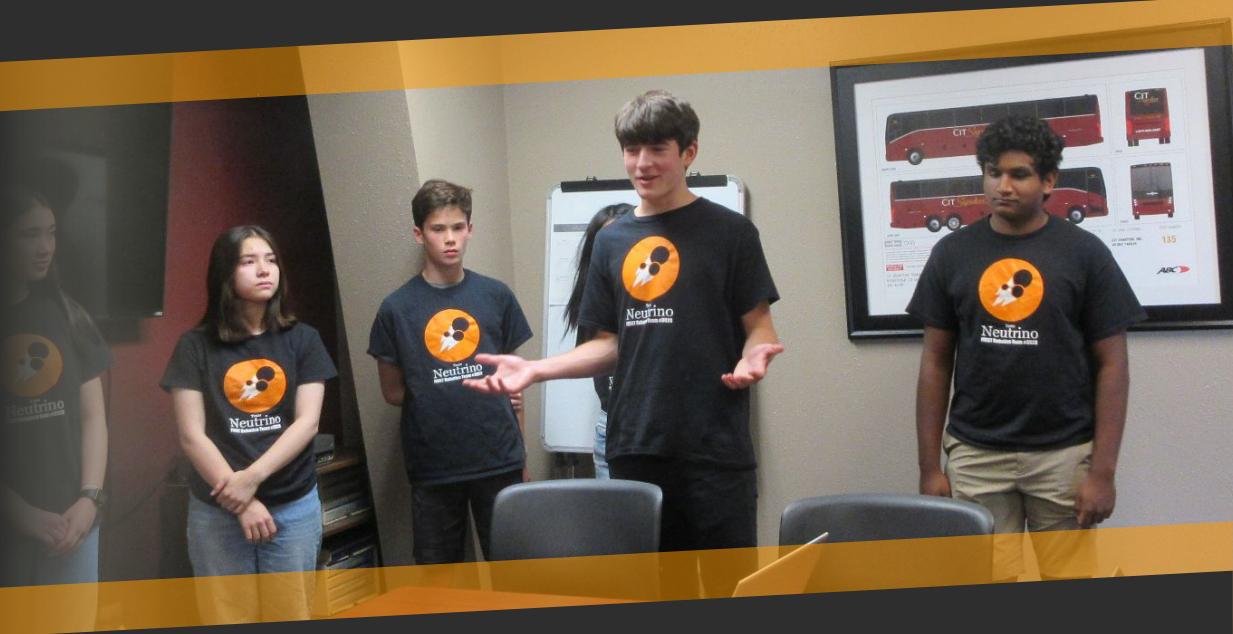


# TEAM NEUTRINO

## CIT Sponsor Visit

JULY 2024

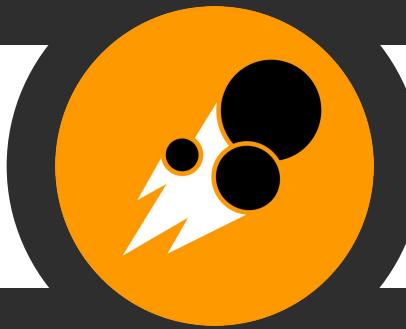
1 PERSON  
REACHED



## CIT SPONSOR VISIT

Our team visited a long-time sponsor, CIT Transportation, and presented to the owner, Kim Gryzwacz. She gave us valuable feedback on how to improve our presentations for future sponsor visits. This visit also played a part in renewing our CIT sponsorship.





# TEAM NEUTRINO

## Bayer Sponsor Visit

JULY 2024

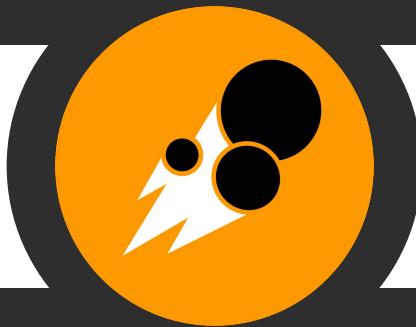
10 PEOPLE  
REACHED



## BAYER SPONSOR VISIT

The team's first visit to Bayer was a great success. The members gave a captivating presentation about the team and its previous season, followed by a demonstration of their robot. The Bayer employees were highly attentive and asked numerous questions, which the team answered with ease.





# TEAM NEUTRINO

## Danfoss Sponsor Visit

JULY 2024

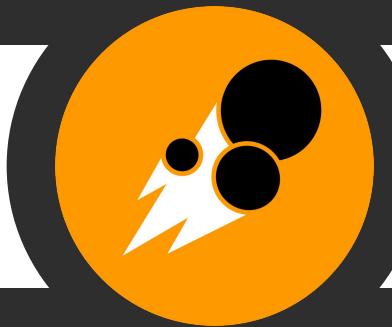
19 PEOPLE  
REACHED



## DANFOSS SPONSOR VISIT

Team Neutrino was excited to visit one of our largest sponsors, Danfoss. At this visit, team members presented about our accomplishments in our past season and thanked them for their continued support. Neutrino members answered lots of questions during our robot demo. After the presentation and robot demo, members were given a tour of the facility.





# TEAM NEUTRINO

## Frontline Sponsor Visit

JULY 2024

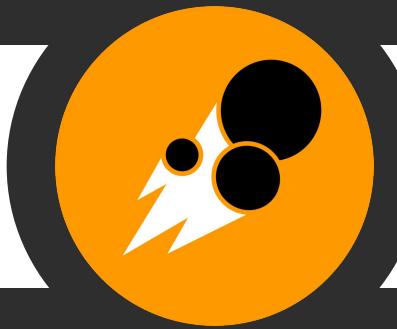
11 PEOPLE  
REACHED



## FRONTLINE SPONSOR VISIT

Our team had the opportunity to visit one of our sponsors, Frontline Bioenergy. We were able to present to a large number of their employees and answered questions about our team and robot. This visit was a great way to continue to connect the people at Frontline!





# TEAM NEUTRINO

## *John Deere Sponsor Visit*

AUGUST 2024

20 PEOPLE  
REACHED



## JOHN DEERE SPONSOR VISIT

Our team had the opportunity to visit one of our sponsors, John Deere. As one of our most valued contributors, these sponsor visits to John Deere are incredibly important. We were able to present to a large number of their employees, did a robot demonstration, toured their facility, and answered questions about our team and robot. This visit was a great way to continue to connect the people at John Deere!





# SHARE INSPIRE CREATE DESIGN

## TEAM NEUTRINO - 2025 SEASON

For more information, visit

**TEAMNEUTRINO.ORG**



**@FRCNEUTRINO**