



# **Triton Robotics**

## Sponsorship Package



# Who Are We?

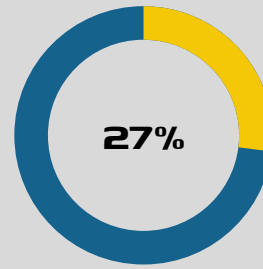
## Our Team

At Triton Robotics, our mission is to empower our members to explore their passions within robotics and cultivate industry-relevant skills essential for their professional journeys. Today, Triton Robotics stands out as one of the most prominent engineering project teams and **the largest robotics student-led organization on campus**, boasting 72 members as of Winter 2025.

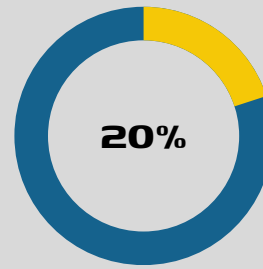
We take **diligence, pride, and passion** in promoting robotics and STEM education among students at UCSD and throughout the greater San Diego area.

## Demographics

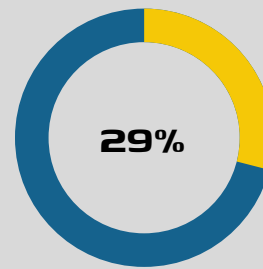
Triton Robotics values **diversity** and is committed to creating an equitable space where students from **all backgrounds** are **welcomed** and **empowered**. Our goal is to foster an **inclusive environment** where all members feel safe, represented, and valued through every aspect of our organization.



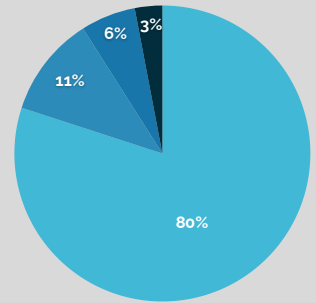
First Generation



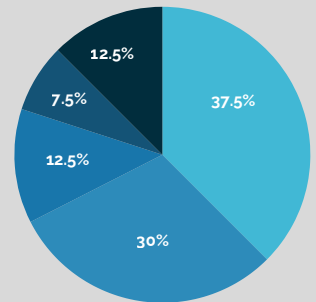
LGBTQ+



Female / Non-Binary



- Asian / Pacific Islander
- White / Caucasian
- Hispanic / Latino
- Black / African American



- CSE / Math-CS
- Mech / AeroSpace
- Electrical
- Data Science
- Other







## Outreach Efforts & Diversity

Outreach lies at the core of Triton Robotics' mission, propelled by our steadfast dedication to expanding the influence of STEM, diversity in STEM, and our passion for robotics to a broader audience. We firmly believe that **nurturing** both a **passion** for robotics and a **welcoming environment** in our community is not just a responsibility but also a privilege.

Since 2021, our team has hosted and participated in various events, including workshops and demonstrations for **local K-12 students** to promote robotics education. We have also taken it upon ourselves to work on resolving existing disparities within the UCSD community.

Keeping to their roots, many of our members also offer **mentorship** to students from their alma mater participating in high school-level robotics competitions such as **VEX** and **FIRST**. Mentors offer themselves as a resource for technical expertise and guidance, assisting students in navigating the thrilling yet demanding realm of competition robotics.



Rolling Hills STEAM Night (2025)



GS Troop 688g (2025)



La Jolla High School Viking Robotics (2025)

### Education Day with UCSD Athletics

Partnered with the UCSD Athletics Department to provide a **live demonstration** of one of our robots in action for **elementary and middle school students** attending a women's basketball game.

### Girl Scout Troop 688g

We visited the Jackie Robinson Family YMCA and Girl Scout Troop 688g, to talk to K-3 students about what robotics is and how they can get involved with robotics at school.

2021

### Grossmont High Workshop

Hosted a **hands-on** computer vision workshop for **underprivileged high school students** to engage with students from predominantly immigrant families in STEM learning.

2023

### Deer Canyon Elementary STEAM Night

Partnering with Deer Canyon Elementary School to provide a **live demonstration** of our robots performing a mock competition **match** for an expected **200 students and their families**.

2024

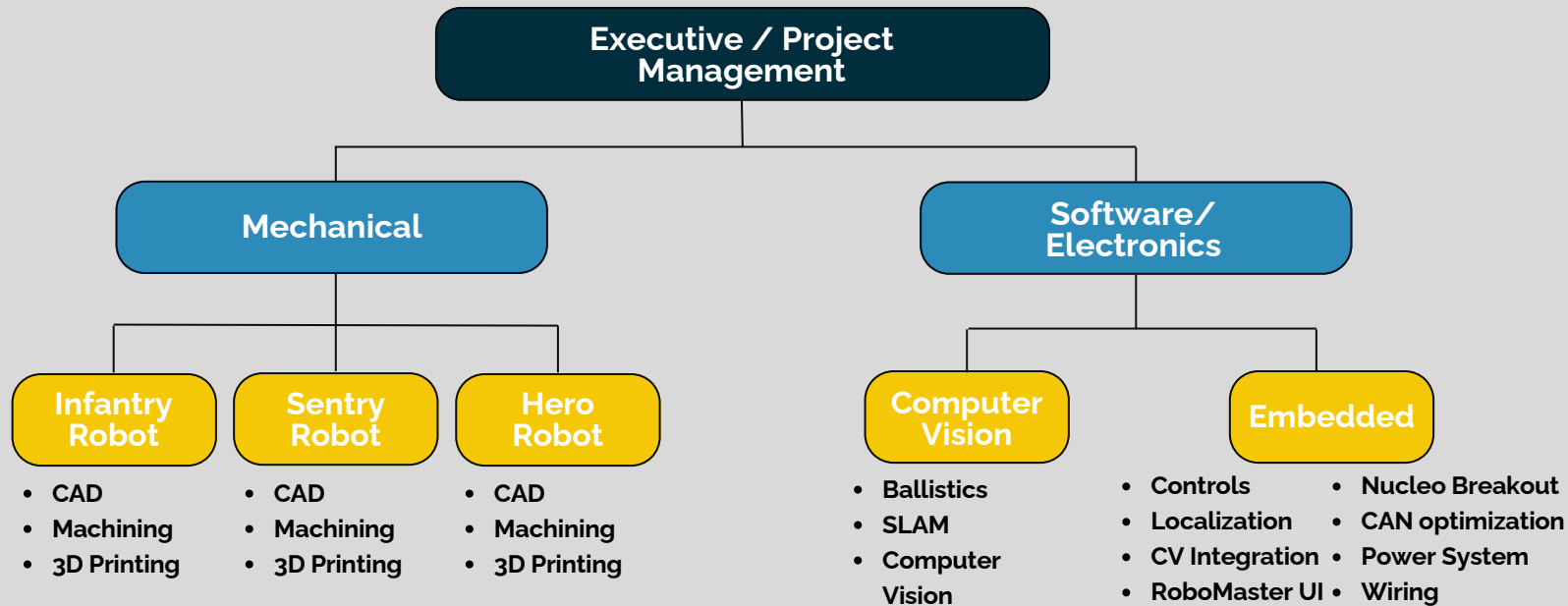
2025



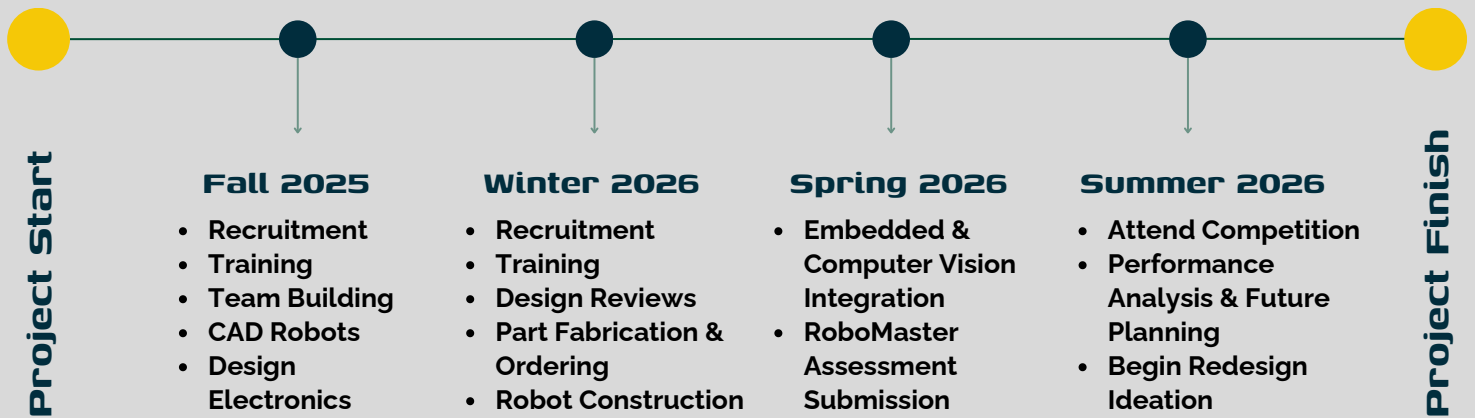
# What We Do

## Triton Robotics Structure

Triton Robotics is structured into four technical subteams: **Mechanical**, **Embedded**, **Computer Vision**, and **Electronics**. Our members specialize and refine their skills in **CAD**, **embedded controls programming**, **machine learning**, or **PCB design**, with the ultimate goal of constructing our four robots: Infantry, Sentry, Hero, and Engineer.



## Annual Timeline

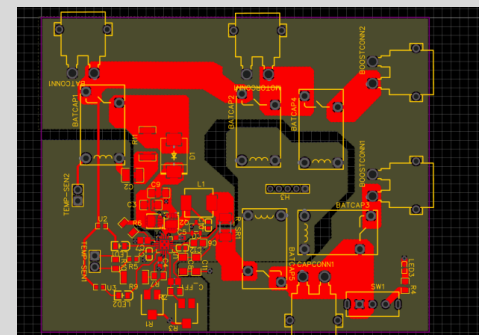
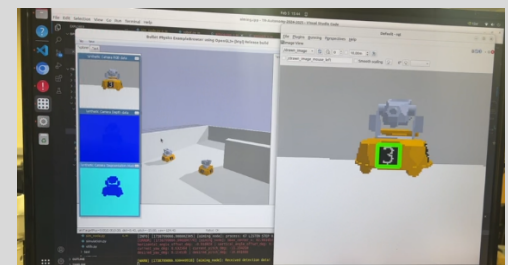
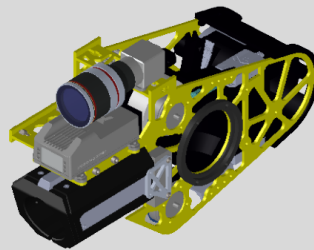
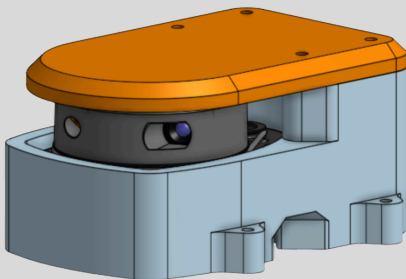
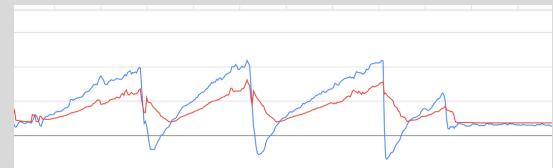
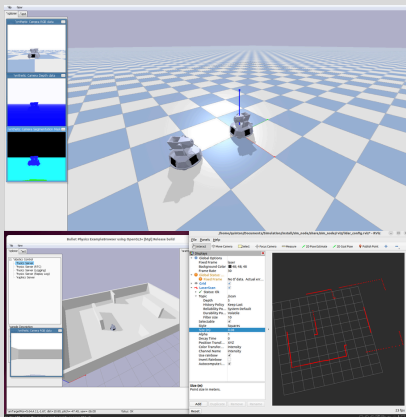
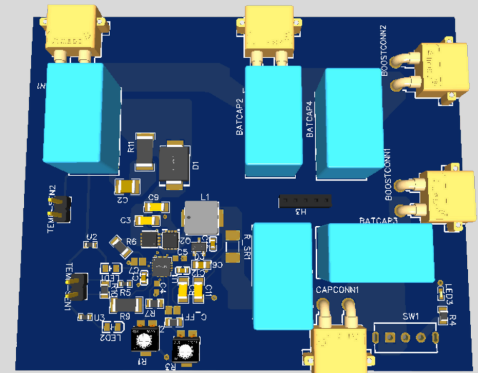
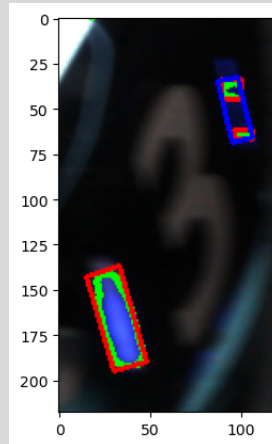




# What our teams are working on



Kp	7.1849
Ki	4.2634e-05
Kd	1.4870e+04



## Technologies we are developing/have developed for the 2025 season:

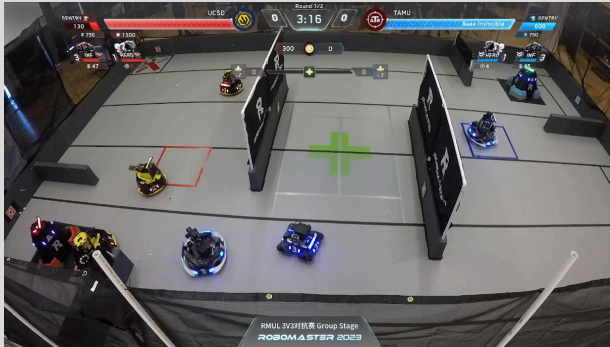
- Passive Suspension Mechanism
- Carbon Fiber Plates
- Minimum-weight metal cutouts
- LiDaR-based SLAM
- Closed-Loop Simulation Environment
- Motor power modeling and adaptive control
- Auto-aim system
- Supercapacitor Charging Board





## RoboMaster North America 2025

Triton Robotics competes against 28 other teams from across North America in the RoboMaster University League (**RMUL**). This annual robotics competition challenges participating teams to independently develop different classes of projectile-shooting robots, each with its strategic advantages and disadvantages. These robots face off on the battlefield with the ultimate goal of neutralizing the opposing team's base.



The competition is **live-streamed** on Twitch and YouTube with professional eSports casters commentating every match as they occur to viewers rooting for their university and local teams. Your company and brand will be exposed to some of the most **talented** and passionate **aspiring engineers** looking for employment.

This past June, we proudly hosted RoboMaster North America 2025 at UC San Diego, bringing together 28 teams from across the continent for an unforgettable weekend of engineering, competition, and collaboration. The event marked the culmination of a year's worth of effort from our 50+ student engineers, software developers, and operations teams. We're excited to build on that momentum in the year ahead as we put in our bid to host again in 2026.

## RM 2026 Timeline

We are currently bidding for RoboMaster North America 2026 competition in San Diego, and our team is focused on ensuring a successful and engaging event. We are coordinating logistics, securing partnerships, and creating an exciting schedule that highlights participants' skills and ingenuity. Our goal is to foster collaboration and innovation within the community while delivering an unforgettable experience for competitors, sponsors, and attendees, making RMNA 2026 a standout event in the robotics landscape.

## Competition History

**Competed internationally** in our team's inaugural year.

**2018**

Once again, Triton Robotics **competed internationally**.

**2019**

Global Pandemic led to the **cancellation** of the competition.

**2020**

RMUL hosted its first competition in College Station, **Texas**. Triton Robotics **placed fifth**.

**2021**

Once again, traveled to **Texas** for RMUL. Triton Robotics **placed first** in the "Engineer" robot competition.

**2022**

Traveled to **Seattle, WA** for RMUL. Triton Robotics competed with a **new fleet** redesigned robots.

**2023**

Traveled to **Boulder, CO** for RMUL in June 2024 with our **most advanced fleet yet**.

**2024**

**2025**

We **hosted** the competition at **UCSD** in June 2025 with our innovative CV.



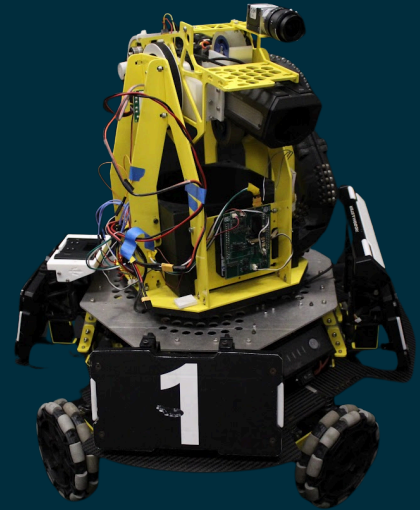


# Our Robots

## Hero

The Hero robot, measuring 770 x 770 x 550 mm, is a **remote-controlled** robot made to act as a tank. It boasts robust health and fires 42mm ammunition at 16 m/s, making it a formidable force. Its priority is **to be the team's tank while maintaining control of the hot-zone.**

As the **primary offensive unit**, Hero relies on Infantry and Sentry robots to fend off opponents and confrontations while focusing on maintaining hot-zone position.



## Infantry

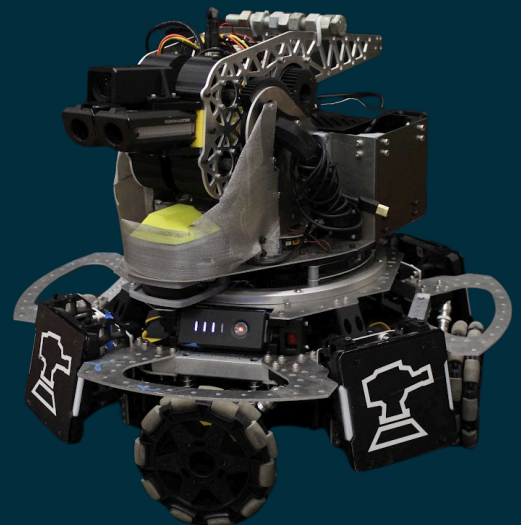
The Infantry robot, measuring 550 x 550 x 470 mm, is **remote-controlled** and made compact for exceptional agility, allowing for swift traversal across the field. Armed with 17mm ammunition fired at a rapid 30 m/s, it excels in **targeting and eliminating moving enemy robots.**

Infantry assumes the role of a **bodyguard** for the Hero, engaging in offensive maneuvers against the opposing team's robots as it goes on the offensive against the enemy.



## Sentry

The Sentry robot, measuring 550 x 550 x 600 mm, is an **autonomous** robot equipped with **computer vision**, allowing it to adapt its actions based on the match conditions. While it fires the same ammunition as Infantry, its larger carrying capacity and substantial health allow for a **dynamic hybrid role as both a defensive and offensive unit.** As such, Sentry autonomously decides between attacking opponents and defending itself and its teammates.





# What We Offer

TIER (\$)	BRONZE	SILVER	GOLD	PLATINUM	DIAMOND
BENEFITS	250+	500+	1000+	1500+	2000+
Donations Matched by UCSD	✓	✓	✓	✓	✓
Quarterly Update Newsletter	✓	✓	✓	✓	✓
Thank You Email	✓	✓	✓	✓	✓
Name on Website		✓	✓	✓	✓
Small Sticker on Robot		✓	✓	✓	✓
Social Media Post			✓	✓	✓
Access to Resume Book			✓	✓	✓
On-campus recruiting event (Resume workshop, mock interviews, tech talk, etc.)				✓	✓
				✓	✓
Large Sticker on Robot					✓

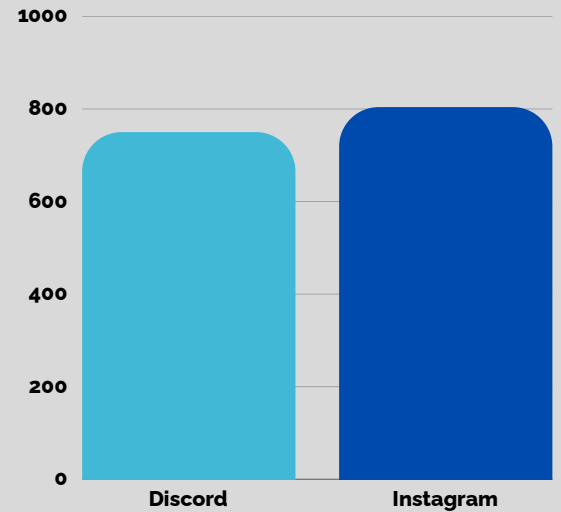


## Your Donations go a long way!

In addition to the benefits above, all sponsors during the period leading up to our competition in June will have **donations matched by UCSD** and will receive a *small sticker* of your **logo** on our robots visible during the competition. *Larger stickers can be used for promotional material.*

Triton Robotics is **classified as a 501(c)(3) non-profit organization (EIN 83-1901017) by the Internal Revenue Service (IRS)**. We are fully committed to transparency and are pleased to provide our determination letter upon request and a donation receipt upon receiving your donation!

## Engagement





# Letter From Leadership

To Potential Sponsors,

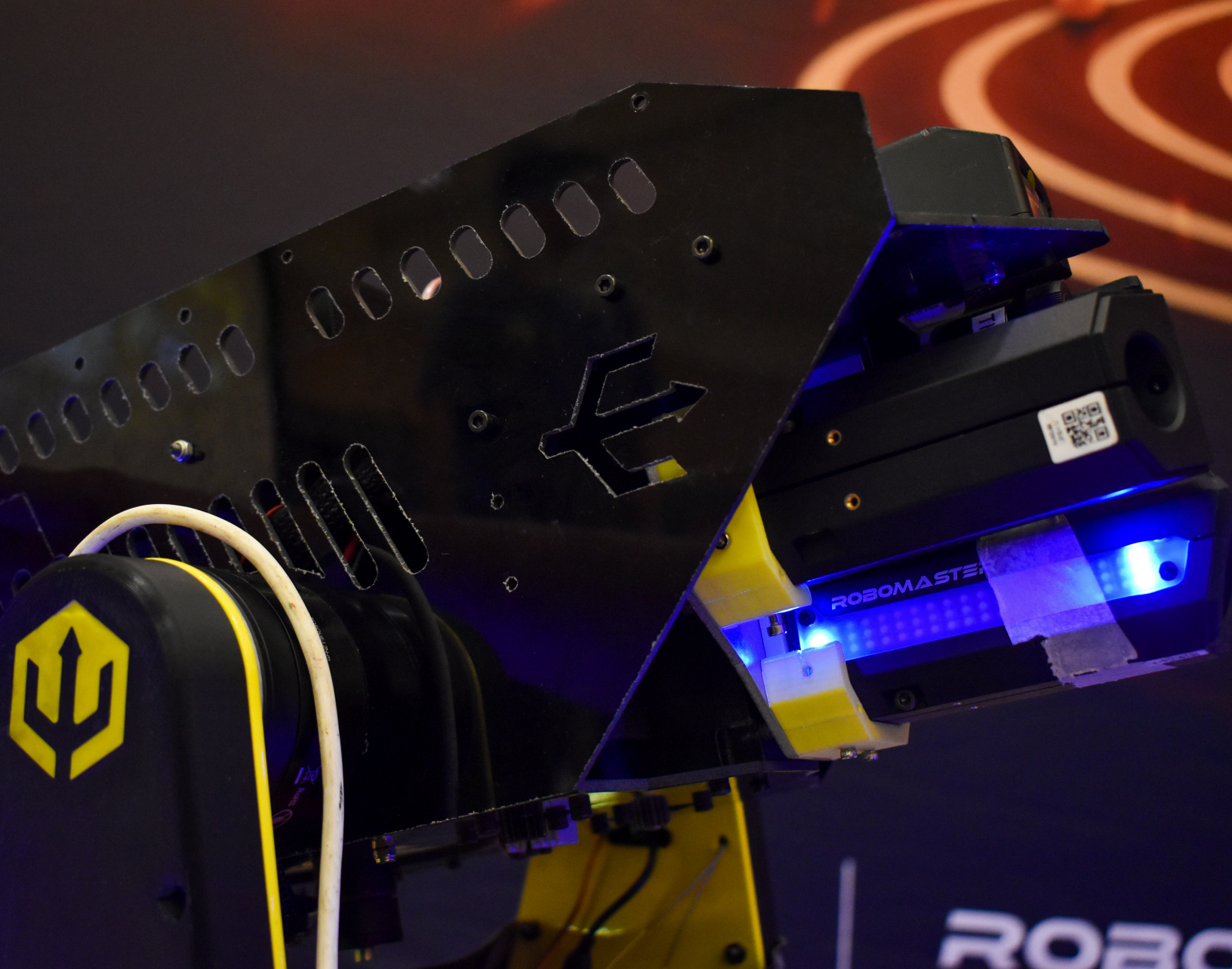
On behalf of Triton Robotics at UC San Diego, we would like to **express our deepest gratitude** for your consideration of our team for sponsorship.

Triton Robotics relies on donations, so your generosity is of great value to us. Your support, including any and **all monetary and in-kind donations**, plays a **crucial role in our organization's success**. With your help, we can continue to provide our members with invaluable learning experiences, empowering them to pursue their passions, and grow as engineers and individuals and to become the next generation of industry professionals and leaders.

Thank you,  
Triton Robotics







# Contact Us!



<https://www.linkedin.com/company/triton-robotics/>



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



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