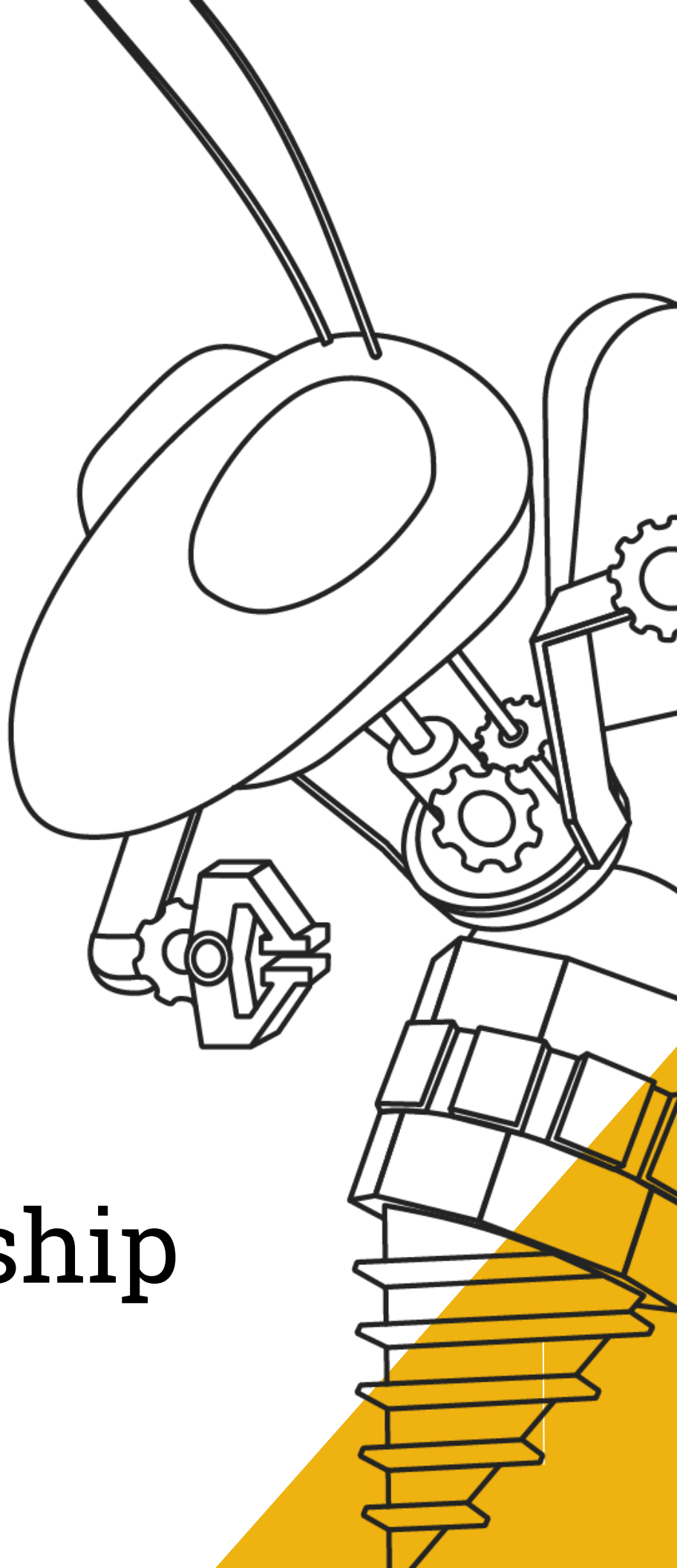


# ROBOJACKETS

COMPETITIVE ROBOTICS AT GEORGIA TECH

## Sponsorship Packet

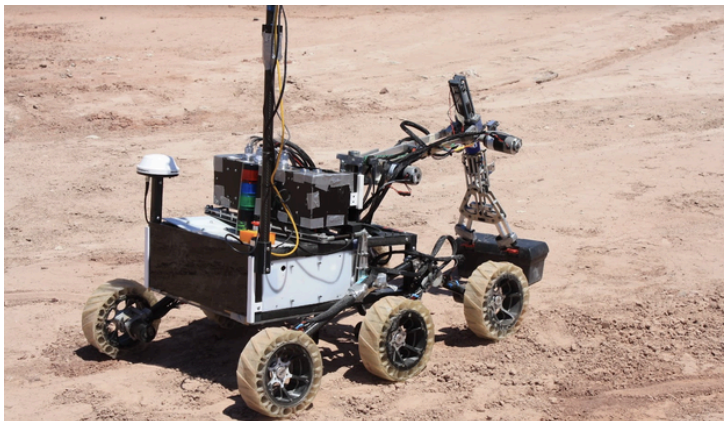
2024 - 2025



# We strive to **promote, educate, and advance** the field of robotics.

RoboJackets was founded as an organization at Georgia Tech in 1998 by one small group of students interested in combat robotics. Now, we have grown to over 400 students, faculty, and alumni actively contributing to our numerous robotics and research projects. Collaborating across several subject areas, our members work year-round to compete in national and international robotics challenges while supporting local STEM communities.

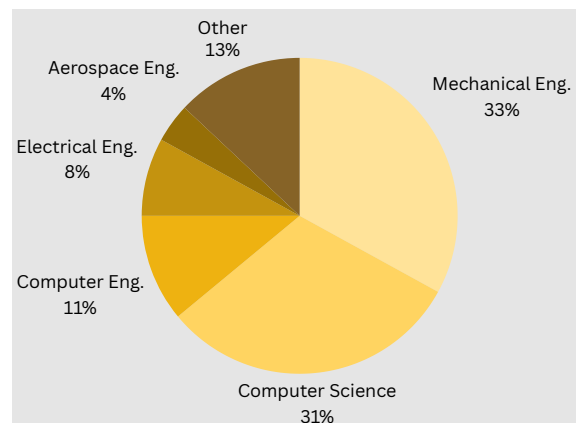
As an organization, we believe strongly in our mission statement: promote, educate, and advance. RoboJackets encourages its members to immerse themselves in the field of robotics through our multifaceted approach. By providing opportunities in leadership, design, prototyping, and manufacturing, students are better prepared when entering the industry. We strive to encourage the next generation of engineers through community involvement and to challenge technical boundaries worldwide.



RoboJackets rover competing in the University Rover Challenge

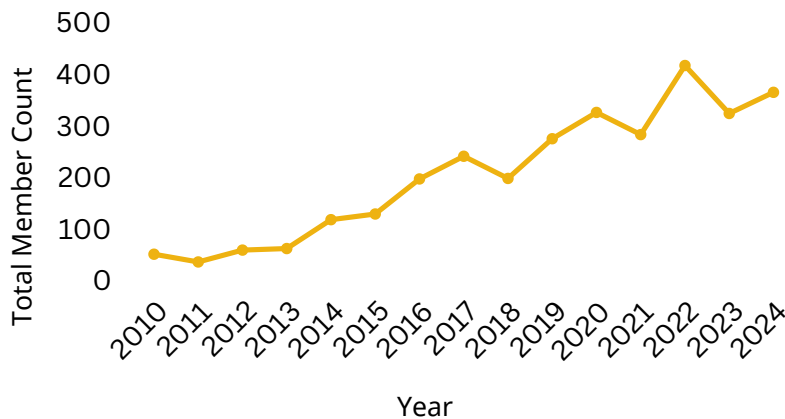


3lb combat robotics teams composed of mentors and mentees compete at regional competition



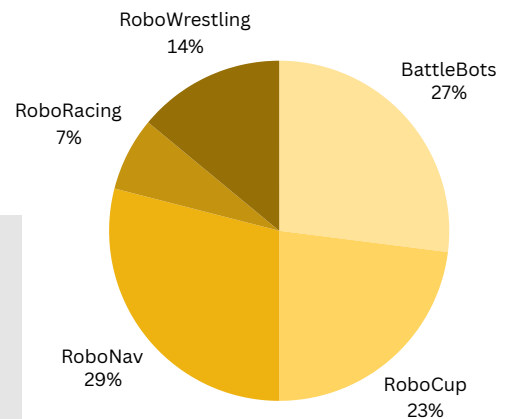
Pursuing a variety of majors, students engage in rich interdisciplinary experiences to better prepare themselves for industry through both leadership and competitive robotics. The representation of students by major can be seen above.

# Take a look at RoboJackets by the numbers.



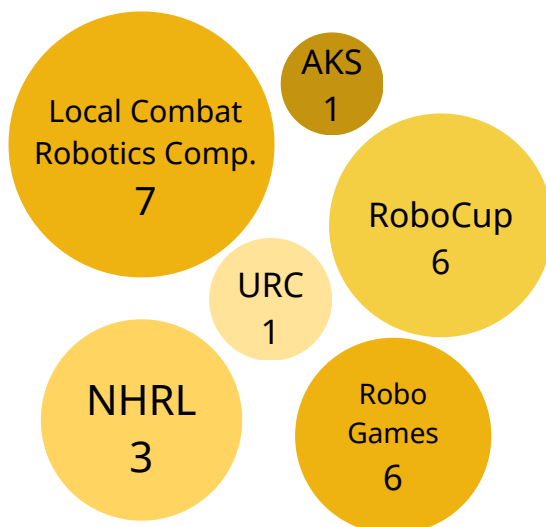
**365 members**

are divided amongst 5 teams, with BattleBots and RoboNav being the largest.

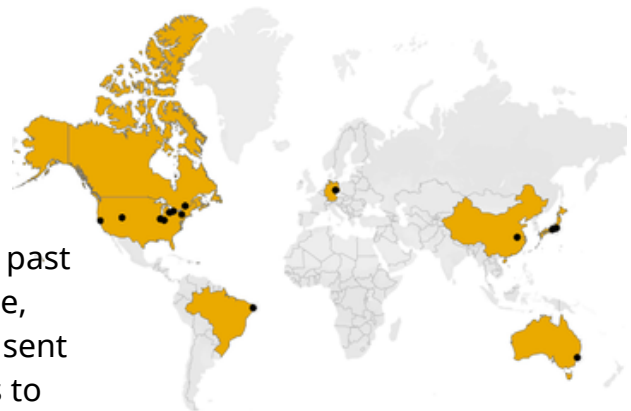


Since 2010, our membership has grown by **800%**. Now, RoboJackets is a thriving organization with five different competitive teams developing a wide range of robots.

This past year we developed **24 robots** to compete in diverse events across the globe.



In the past decade, we've sent teams to **7 countries**.



RoboCup and All Japan RobotSumo yielded the furthest distance traveled, with their 2023 competitions in Bordeaux, France, and in Tokyo, Japan, respectively.

# We are home to **5 different competitive teams.**

## BattleBots

The BattleBots team designs combat robots in various weight classes with the aim to disable their opponents. The team focuses on mechanical design, manufacturing, and electronics.

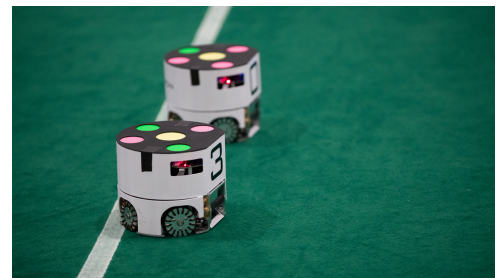
**2024 NHRL April 1st Place | 2024 NHRL June 3rd Place |  
3 Robots Qualified for 2024 World Championship**



## RoboCup

The RoboCup team competes in the Small Size League (SSL) of RoboCup, an autonomous robot soccer competition. The team focuses on artificial decision-making and multi-agent cooperation.

**1 of only 2 American teams competing in 2024 RoboCup SSL**



## RoboNav

The RoboNav team competes in the International University Rover Challenge (URC) with a Mars rover and drone duo. The team focuses on dextrous manipulation, rough terrain traversal, scientific analysis, and path-planning.

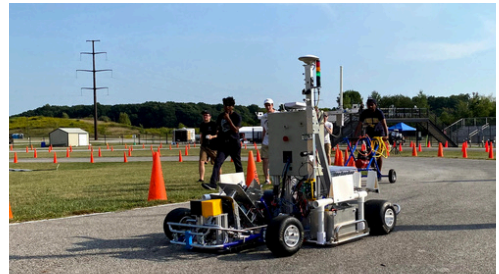
**Top 30 of 102 at 2024 URC**



## RoboRacing

The RoboRacing team focuses on high-speed autonomous navigation through a track. The team works on two different sizes of robots, one the size of an RC car and the other a full-size go-kart.

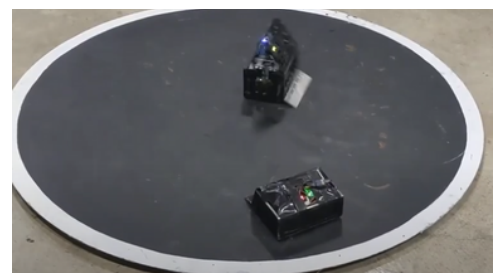
**5th Place at 2023 Autonomous Karting Series (AKS)**



## RoboWrestling

The RoboWrestling team competes in RoboGames and the All Japan Robot Sumo tournament (AJRST). The team develops high-speed robots that autonomously push an opponent out of a ring in order to win the match.

**5th place at RoboGames | 64th Place at AJRST**

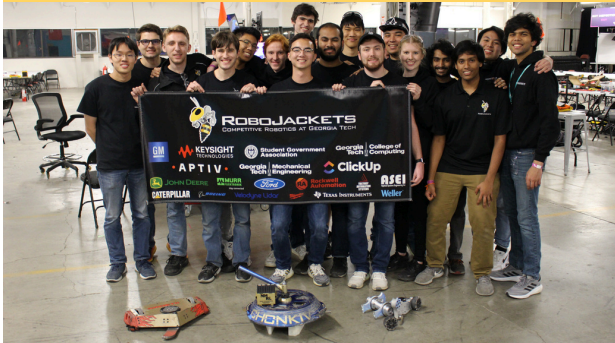




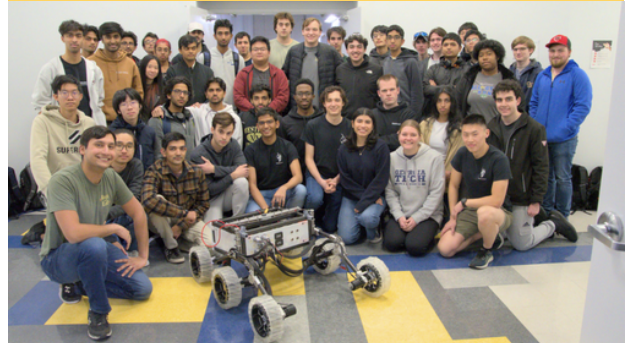
# Meet **our students**

collaborating on projects.

## BattleBots



## RoboNav



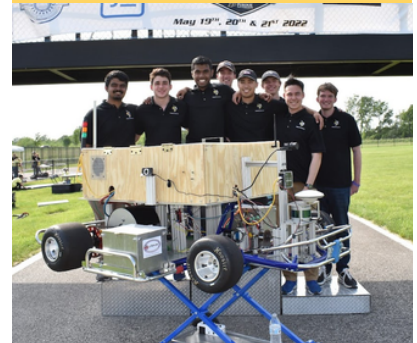
## RoboWrestling



## RoboCup



## RoboRacing

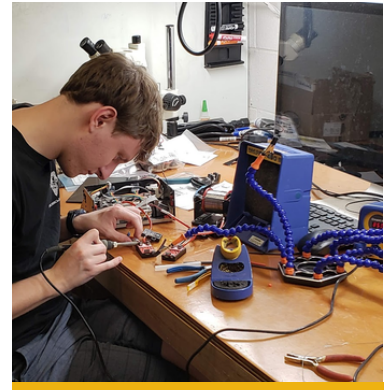


# **RoboJackets in Industry**



# Our members go through training to gain **valuable skills and experience.**

RoboJackets has multiple avenues to pass down knowledge to new members, with the most notable being our general training. This program uses a focused curriculum to give new members the skills they need to contribute to our teams. After training ends, our new members begin to tackle our projects and overcome real issues, with older members acting as mentors.



Throughout our members' time in RoboJackets, they apply various mechanical, electrical, and software skills and tools, which better prepare them to contribute to a professional environment. Current students boast the value of their experiences from RoboJackets when participating in internships.

RoboJackets has provided me with real-world engineering experience, beyond what I learned in the classroom. I credit the projects and training to helping me gain technical background I needed to succeed during my internships.

- Arvind Srinivasan, RoboCup

## Mechanical



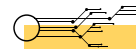
- Autodesk Inventor
- Part design
- CAM design
- Stress calculations
- Finite element analysis
- CNC machining
- Rapid prototyping and conventional machining:
  - Manual mills
  - Lathes
  - Waterjet
  - 3D printing

## Software



- Specific tools and languages
  - C++
  - Python
  - GitHub
  - CircleCI
  - ROS/ROS2
- Sensor fusion
- SLAM
- Artificial intelligence
- Machine learning
- Multi-agent planning
- Computer vision

## Electrical



- Microcontrollers and FPGAs
- Embedded systems firmware
- Autodesk EAGLE
- PCB design
- Board assembly
- Debugging using test equipment:
  - Oscilloscopes
  - Digital logic analyzers
  - Multimeters

# Our members work with community organizations to **promote robotics.**



RoboJackets hosts the GeorgiaFIRST FRC Kickoff. This event is attended by over 1,200 students and features the annual game reveal along with mechanical, electrical, and software workshops.

## As volunteers...

- We serve STEM communities in Georgia.
- We serve over 1,000 hours across the organization.
- We impact upwards of 4,000 students per year for competitions such as FIRST Robotics.

## As mentors...

- We offer design review assistance to high school students for competitions including FIRST Robotics.
- We provide shop tours to inspire future generations to pursue an interest in STEM and robotics.
- We setup booths to reach out to thousands of children and students at Atlanta festivals.

## As leaders...

- We manage hundreds of people annually with over 35 student leaders across teams, outreach, and training.
- We manage sponsorship relations and team budgets totaling upwards of \$100,000.

Mentorship has been a pillar during my four years here. Every year, we have a deep impact upon youth robotics. I'm thrilled to have been a part of that by putting my time toward not just my future but the future of others as well.

- Wallace Gray, BattleBots



RoboJackets gave me a place where I belong. I have made great friendships, developed new electrical skills, and learned to manage a team of over 40 people. RoboJackets is where I learned to combine engineering and leadership.

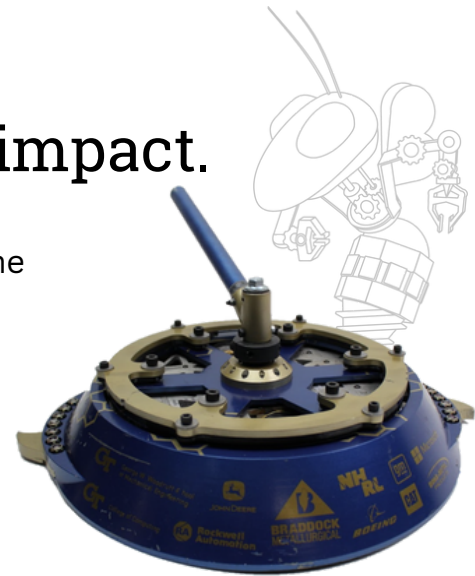
- Marine Maisonneuve, RoboCup





# Any level of support makes an impact.

The generous support we receive from our sponsors enables us to empower local communities and push the technical envelope with generous donations from our sponsors. RoboJackets uses sponsorships to build robots, send students to competitions, and provide resources to the K-12 robotics community. Monetary donations go through the Georgia Tech Foundation, making them tax deductible.



**Tiers accumulate monetary and in-kind donation value each fiscal year (July-June):**

<b>Platinum</b> \$25,000 +	<b>Gold benefits and...</b> <ul style="list-style-type: none"><li>• Opportunity to present at outreach events</li><li>• Large logo displayed on all platforms</li></ul>	
<b>Gold</b> \$15,000 +	<b>Silver benefits and...</b> <ul style="list-style-type: none"><li>• Large logo on team shirts and banner</li><li>• Medium logo on robots</li><li>• Opportunity to send targeted emails for recruitment</li></ul>	
<b>Silver</b> \$10,000 +	<b>Bronze benefits and...</b> <ul style="list-style-type: none"><li>• Medium logo on team shirts and banner</li><li>• Small logo on robots</li><li>• Annual recruiting session with the team</li></ul>	
<b>Bronze</b> \$2,500 +	<b>Friend benefits and...</b> <ul style="list-style-type: none"><li>• Access to resume book</li><li>• Small logo on team shirts and banner</li></ul>	
<b>Friend</b> \$250 +	<ul style="list-style-type: none"><li>• Logo on website</li><li>• Newsletter with semesterly updates</li></ul>	

If your company is interested in pursuing a partnership with RoboJackets, please contact us. We look forward to discussing opportunities for working with you during a tour of our shop space or a call with our leadership team!

**Email:** [hello@robojackets.org](mailto:hello@robojackets.org) | **Website:** [robojackets.org](http://robojackets.org)



# Elevate our facilities

to new heights with your support.

Our cutting-edge robots are earning global acclaim, and we need your support to enhance our facilities and materials for advanced testing. Your monetary donations for the special projects are tax-deductible. Your donation for a special project will qualify you for the sponsorship tiers. We will also proudly brand and name the project with your or your company's logo.



## BattleBox

\$30,000



Our combat robots nearly breached an arena during competition! To ensure safe and rigorous testing, we are seeking funding for a state-of-the-art, long-term testing solution: a fully-equipped shipping container arena. This facility will:

- Safely test and fight combat robots of any weight class
- Serve as a versatile mixed-use facility for various projects

To recognize your support, the container will be painted and branded with your company's logo on the side. This BattleBox will be visible to several hundreds of students and employees visiting or parking at the facility each day.

If your company is interested in sponsoring a specific project or would like to request detailed information, please contact us. We look forward to answering any questions you may have!

**Email:** [hello@robojackets.org](mailto:hello@robojackets.org) | **Website:** [robojackets.org](http://robojackets.org)

# Thank you to our current sponsors!

## Platinum



FOUNDATION



## Gold



## Silver



JOHN DEERE



Rockwell  
Automation



## Bronze

**CATERPILLAR**



## Friend

