# TECHNO TITANS ROBOTICS FOUNDATION, INC.

EIN/TAX-ID: 81-0762109

501(C)(3) NON-PROFIT ORGANIZATION

### **SPONSORSHIP PACKET**



# ABOUT THE TEAM

Northview Techno Titans Robotics Foundation Inc. is a 501(c)(3) non-profit organization which supports the Techno Titans Robotics Team from Northview High School in Johns Creek, Georgia. Each year, we participate in the *FIRST*® (For Inspiration and Recognition of Science and Technology) Robotics Competitions (FRC).

Initially, our team started as a school club in 2005. In 2015, a 501(c)(3) foundation was formed to financially support the team, increasing the team's stability and future potential. This became even more important when the team lost their work space at Northview High School in 2019. After working in a very small store front for two years, the team was able to secure a much bigger space within walking distance to the school. This new location allows us to engage our community through educational programs and robotics demonstrations to introduce and spread STEM (Science, Technology, Engineering, and Mathematics) ideas.



## **MISSION**

Our mission is to prepare students for careers in STEM, instill a strong foundation for success in any future endeavors, encourage collaboration and teamwork, and actively mentor students and point them in the right direction as they learn skills through designing and building robots, working with others, and building sponsor relationships.

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

### **SUBTEAMS**

#### **BUSINESS**

There are many jobs that do not require technical engineering skills. The business team tasks include:

- Designing and branding of merchandise
- Social media management
- Website content management
- Video creation
- Team photography
- Seeking and maintaining sponsorships
- Applying for awards and grants

#### **DESIGN & FABRICATION**

The design team uses computer aided design (CAD) software to blueprint the robot. The fabrication team brings the blueprints to life with metal and power tools. Some of the tasks the mechanical team does:

- Build the robot
- CAD (Solidworks)
- Visual representation of the robot
- Working with power tools

#### **ELECTRICAL**

Electrical is the subteam that brings power to the robot. The electrical team works on:

- Wiring the robot
- Power regulation
- Pneumatics
- Sensors (ultrasonic, gyroscope, potentiometers, etc.)

#### **PROGRAMMING**

The robot is just a block of metal and wire until the programming team codes the robot's movements. Skills the programming team uses:

- Java for the main code
- Python for vision code
- Mobile app development
- Using Raspberry Pis



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### RECENT ACHIEVEMENTS

- FIRST World Championship, 10th place, Milstein Division (Alliance 8) 2023
- PCH District Championship, 6th place finish 2023
- PCH District Gwinnett Event, Excellence in Engineering Award 2023
- PCH District Gwinnett Event, Finalist 2023
- PCH District Albany Event, Impact Award 2023
- PCH District Albany Event, Winners 2023
- PCH District State Championship, Team Spirit Award 2022
- PCH District Albany Event, District Chairman's Award 2022
- PCH District Dalton Event, Entrepreneurship Award 2022
- July HEAT, Event 2 (Georgia FIRST): Feel the Heat Award 2021
- FIRST At-Home Challenge, Game Design Engineering Design Award 2021
- PCH District Regional Chairman's Award 2021
- GRITS Trophy Design 2020 (Co-winner)
- GRITS Robot Model Design 2020 (Co-winner)
- PCH District State Championship Dean's List Finalist Award 2020
- PCH District Gainesville Event, Entrepreneurship Award 2020
- Turing-Hopper Division Entrepreneurship Award 2019
- PCH District Championship Regional Engineering Inspiration Award 2019
- PCH District Forsyth District Creativity Award 2019
- PCH District Albany Safety Award 2019
- PCH District Albany Event Finalist 2019
- PCH District Albany Engineering Inspiration Award 2019
- PCH District Gainesville Entrepreneurship Award 2019





# PROJECTS & ACTIVITIES

#### **SUMMER CAMP**

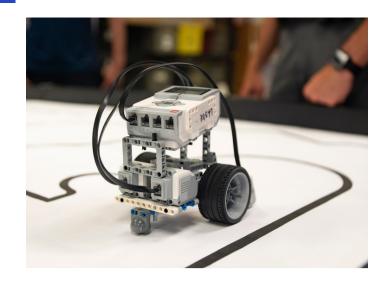
Every year, varsity robotics team members host a summer camp open to rising 5th to rising 8th graders. During the summer camp, children learn computer aided design (CAD), programming, and other STEM related subjects through projects. While working on these projects, kids develop various skills as well as learn how to function as a team and become better teammates themselves in the future.

#### **FALL BOOTCAMP**

Students interested in robotics are exposed to the multiple sub teams including: mechanical, electrical, business, design, and programming. Students are taught the fundamentals during a two-week boot camp. Through critical thinking and creative problem solving, their skills are put to the test by being assigned projects.

#### **MOBILE GAME APPS**

We develop a game for mobile devices themed around the FIRST® competition every year. In 2023, our team created "Techno Tower Defense" which was based on the FIRST® Charged UP theme. Developing a game every year has become a Techno Titan tradition, and we hope to make our future games available for download for both iOS and Android devices. We hope our games will be played by non-robotics members, helping spread STEM in the community.



#### **FIRST® COMPETITION**

Every FIRST® season we design, build, wire, and program a robot to take to competition. Although there is a different specific task to accomplish for every competition, robots generally have to be capable of collecting and moving objects around, climbing up somehow, and moving autonomously. Robots weigh 125 pounds and must be built within 8 weeks.



#### **KRONOS - TSHIRT BOT**

Over the past few years, we have designed and built a T-shirt shooting robot. Kronos has spread STEM to many people in Johns Creek in fun and exciting ways. Kronos is sent to various community events to advertise STEM in fun and exciting ways the hopes of exposing people to the capabilities of our program.

# SERVICE

In order to grow STEM in our community, we participate in local events and mentor teams including *FIRST*® Lego League (FLL) and *FIRST*® Tech Challenge (FTC) teams.

#### **MENTORSHIP**

In addition to our own team, we support and mentor FLL and FTC teams through our outreach programs.

FIRST® Lego League (FLL) and FIRST® Tech Challenge (FTC) Teams are FIRST® programs aimed at elementary and middle school students.

We currently host and mentor two FLL teams, Dragon Tech and the Techno Tigers, and one FTC team, Atlantis.

We volunteer our time at various FIRST events, and host an FLL Regional Tournament where FLL teams compete with their robots and Innovation Projects.

#### **LOCAL EVENTS**

We give robot demonstrations to current and future sponsors, Uh `c W ` Wa a i b]hmYj Ybhgž UbX ci f ` ][ \ gWcc` gdcfh]b[ Yj Ybhg.

We attend and demonstrate ci f robots at elementary school STEM days and IEEE Family Science nights to promote STEM and robotics in our community. We host a cbh\`mSTEM nights and even help local Girls Scouts earn merit badges. *Techno Titans Day of Giving* is a new tradition where we give back with donations to a local food and clothing banks.

"It's not just about the robot." - Dean Kamen





# SUPPORTING THE TECHNO TITANS

#### WAYS TO SUPPORT OUR TEAM

- **Financial** Money goes toward robot construction, competition fees, outreach, prototyping, and competition travel.
- Mentorship Allows students to interact with professionals and learn from them throughout the season. Provides the promotion of STEM to everyone on the team by attending team meetings and build sessions.
- In-kind donations Include services such as machining or parts donation. Donations are key to manufacturing the robot. Any combination of the above categories or any type of support and/or amount of sponsorship is much appreciated.

#### SPONSORSHIP BENEFITS

Sponsorships are not one-way affairs; the Techno Titans return the favor. Benefits of sponsorship:

- Increased brand recognition.
- The team proudly recognizes its sponsors on the robot, team apparel, and at FIRST® competitions.
- It is an investment in the future, as our team trains potential employees.
- It is tax deductible.





#### **SPONSORSHIP TIERS**

We value help in any way, shape, or form from our sponsors. This can be done through money, but it does not have to be illustrated in monetary value. Donations can be any form of support, even a mentorship. In fact, if a mentor is provided, you are already a **Gold** level sponsor.

#### DIAMOND

For donations \$3000+: all benefits of **Gold** plus company logo displayed on robot

#### GOLD

For donations \$1500 - \$2999: all benefits of **Silver** plus company logo on t-shirt

#### **SILVER**

For donations between \$1000 and \$1499: all benefits of **Bronze** plus company logo displayed in pits during competitions

#### **BRONZE**

For donations between \$500 and \$999: company logo on handbook, brochure, and website

### **CONTACT INFORMATION**

The Techno Titans believe communication is key to building and improving our sponsor-team relationship. For any questions or concerns regarding our sponsorship details, please contact us.

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Northview Techno Titans Robotics Foundation, Inc. PO Box 1658 Duluth, GA 30096

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10700 Abbotts Bridge Road, Suite 120 Johns Creek, GA 30097

#### TO DONATE:





