

# **TEAM VECTOR**

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Dear Future Sponsor,

The Tomball Memorial High School robotics team, Vector 8177, is hoping you will support us for this year's FIRST Robotics Competition (FRC) Season. It is an event that challenges thousands of high school teams, each tasked with designing and building a robot capable of completing difficult tasks while collaborating with others. With your contribution, it will enable us to reach our goals.

Vector 8177 started its journey as a means to rise to our full potential, and with your help, the team can expand its reach to more students and spread STEM values. Through this program, members learn lifelong skills such as business, teamwork, management, leadership, computer science, and engineering. It prepares students for college by offering the opportunity for hands-on and practical development of skills.

In order to continue the program, we need your support to attend competitions, buy parts and technological tools, and other necessities. Your material or monetary donation is taxdeductible as we are a 501 (c)(3) charitable organization. Listed below, we have several sponsorship tiers with multiple ways to recognize your donation. Your support will make an impact on this community and help establish a lasting legacy for the Vector 8177 team.

Vector 8177 is always seeking the help of volunteer mentors and would appreciate anyone that is willing to share their knowledge. Despite teams being student run, mentors are an integral part to their success. Our mentors have shown us this by sharing their experiences and guiding us to become a better team. Any interest in becoming a mentor would go a long way towards our success as a team.

Your sponsorship allows us to do what we couldn't before. We thank you for your time and consideration.

For more information about who we are and what we do, feel free to visit our website at <u>www.vector8177.com</u> or email us through <u>vector8177@gmail.com</u>.

Sincerely,

The Vector 8177 Team



F.I.R.S.T. "For Inspiration and Recognition of Science and Technology."

# **OUR IMPACT**

FRC Team 8177: Vector was founded with the intent to fuel interest for STEM at Tomball Memorial High School. With this program, we are able to provide a place where students foster a strong passion for science, technology, engineering, and develop their critical thinking and problem-solving skills. FRC creates a competitive environment that our members thrive in as they brainstorm, design, construct, and test a unique robot.

Not only do members build strong foundations essential to engineering and programming, they also gain crucial career skills and experience that employers and colleges value immensely. Students exclusively qualify for \$80 million in scholarship money for participants of *FIRST* Robotics.

### Skills

More important than the competition and awards is the plethora of essential work-life skills that prepare students for future jobs and adult life. The mentors on our team are able to share valuable knowledge as members collaborate and learn about:

- Business planning, marketing, and fundraising
- Working with tools and equipment
- Computer Aided Design (CAD)
- Programming (Vision Tracking, Autonomous, etc.)
- Leadership, communication, and teamwork skills
- Advanced engineering and math concepts
- Media (Photography & Videography)
- Writing Skills (Business, Technical Explanations, etc.)

## **Community Outreach**

Each year, veteran members from our team reach out to elementary schools in our district and help boost engagement in STEM programs like FLL (First Lego League). Our members get the opportunity to share their expertise and knowledge with the younger generation and impact their lives. Even more, the business team on Vector 8177 has worked hard to organize an annual Robotics Summer Camp for incoming 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders in Tomball ISD who are interested in STEM topics.

Not only do members plan events that contribute to the passion and spread of STEM values at Tomball Memorial and Tomball ISD, they also volunteer at local events and organizations. This past summer, we went out to places like the Houston Food Bank to lend our help with sorting food for those in need. In addition to teaching students the technical skills needed for success later on in life, we hope to impact and give back to our community.



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# ACCOMPLISHMENTS

### **Awards & Accomplishments**

Each and every year, we strive to achieve more as our students gain more experience and learn more about robotics. Over the past 3 years, we have worked incredibly hard to build a successful team and robot that competes at the highest level. This hard work has paid off as each new year we continue to outperform the previous year.

#### 2020

#### **Greenville Regional**

Rookie All-Star Award Highest Rookie Seed Award Woodie Flowers Nomination

#### 2021

Infinite Recharge @ Home Rookie Game Changer Award Rookie Design Award Creativity Award

#### **Texas State Cup Competition**

4<sup>th</sup> in Bluebonnet Division (36 Total Teams) Competed in 6-Team Round Robin Finals

#### 2022

**Channelview District** 

District Event Winners – 1<sup>st</sup> Place Alliance Industrial Design Award

#### **Pasadena District**

District Event Winners – 1<sup>st</sup> Place Team & Alliance Innovation in Control Award

#### **Texas District Championship**

Top 10 in State of Texas 5<sup>th</sup> Alliance Captain – Playoff Quarterfinals Imagery Award

#### F.I.R.S.T. World Championship

Carver Division – Playoff Quarterfinals Youngest Team to Make Playoffs at Worlds

#### 2023

#### **Channelview District**

District Event Semifinalists Quality Award

#### **Houston District**

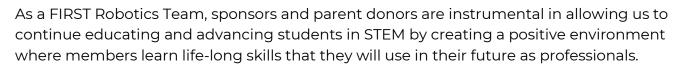
3<sup>rd</sup> Alliance Captain – Playoff Semifinals Quality Award

#### **Texas State Championship**

Rookie Game Changer Award Rookie Design Award Creativity Award

F.I.R.S.T World Championship

# **TEAM NEEDS**



In addition to covering the costs of expensive components used to construct a sturdy, competition-ready robot, your sponsorship (monetary or material) will contribute to upgrading our workshop with new tools, equipment, and training resources that will be able to support teaching new members about STEM.

Below is a breakdown of Team Vector's yearly expenses as well as the cost of parts and materials used in each season:

CATEGORY	SPECIFICS	COST
FRC Registration	Two District Competitions	\$6000
	State Competition	\$4000
	Worlds Competition	\$5000
Robot Expenses	Drive Train (Gears, Gearboxes, Wheels, etc.)	\$4000
	Electronics (Motors, Power Distribution Panel, etc.)	\$3750
	Raw Materials (Aluminum, Wood, Plastics)	\$1000
	Consumable Parts	\$2500
Other Expenses	Tools and Equipment	\$2000
	Transportation & Lodging	\$4300
	Outreach & Media	\$3250
Total Cost		~\$36,000



## **SPONSORSHIP LEVELS**

At Vector 8177, any donation goes a long way towards the success of our team and is always appreciated. We have multiple sponsorship level benefits, which are listed below:

#### Notable Recognition (\$100 - \$499):

- Thank You Letter for Your Support
- Photograph of Our Competition Team and Robot

#### Bronze Level (\$500 - \$999):

- Thank You Letter for Your Support
- Photograph of Our Competition Team and Robot
- Company Name/Logo on Team Website

#### Silver Level (\$1000 - \$2499):

- Thank You Letter for Your Support
- Photograph of Our Competition Team and Robot
- Company Name/Logo on Team Website
- Shoutout On Our Social Media (Instagram, Youtube, etc.)
- Company Name/Logo on Team Poster (Brought to Every Competition)

#### Gold Level (\$2500 - \$4999):

- Thank You Letter for Your Support
- Photograph of Our Competition Team and Robot
- Company Name/Logo on Team Website
- Shoutout On Our Social Media (Instagram, Youtube, etc.)
- Company Name/Logo on Team Poster (Brought to Every Competition)
- Company Name/Logo on Team Shirt

#### Platinum Level (\$5000+):

- Thank You Letter for Your Support
- Photograph of Our Competition Team and Robot
- Company Name/Logo on Team Website
- Shoutout On Our Social Media (Instagram, Youtube, etc.)
- Company Name/Logo on Team Poster (Brought to Every Competition)
- Company Name/Logo on Team Shirt
- Company Name/Logo on Competition Robot
- Listed as Chief Sponsor on Vector 8177's website



### Sponsorship Information

#### EIN. #84 - 3840557

Checks should be made payable to: Tomball Memorial Engineering and Robotics Society (TMEARS)

Donations may be tax deductible; please contact the team for more information. Our team is a **501(c)(3) nonprofit organization** 

Mailing Address: Mr. David Monroe 19100 Northpointe Ridge LN, Tomball, TX 77377

Business Name:			
Contact Name:			
Mailing Address:			
City: State:	Zip Code:		
Phone: ()	Email:		
Business Website:			
Amount Donated: \$			
Material Donation (if applicable):			

On behalf of all of us, the Vector 8177 Team thanks you for your generous donation and looks forward to working with you in the future!























