



### **How did Solar Racing get started at Georgia Tech?**

“Solar Jackets” was founded in 2008 with the goal of converting a gas-powered Audi TT to a solar-assisted electric vehicle (SAEV). After successfully completing the SAEV and gaining valuable experience, our team of undergraduates moved on to building a completely in-house solar powered car. We raced in the Formula Sun Grand Prix where we were the only Solar Racing team from the Southeast. We now have over 70 members studying disciplines ranging from Engineering to Computing to Business.

The last few years have been very exciting for the team. We changed our name from “Solar Jackets” to “Solar Racing” after multiple people tried to buy Solar Powered Jackets from our team. Additionally, we gained over 90 new recruits at the beginning of the 2014-2015 academic year. Lastly, we are so thrilled to present the completed Endeavor and introduce our future plans for the organization.

### **Why do our members stand out among other Tech students?**

Working on the car is a great way for our team members to develop valuable skills, many of which apply directly to what these students wish to do in their careers. Additionally, Solar Racing team members have the opportunity to learn and practice skills they might not get a chance to do within their specific major. One of our Biomedical Engineers has become highly proficient in electrical engineering. Likewise, a Mechanical Engineer leads the business team. These examples represent the wide variety of proficiencies our members gain by being on the team. Working on a real life project like Endeavour teaches us more than we could have imagined about developing technology and inspires us to continue our education. Our members are well-rounded and quick learners, which we believe makes them true representatives of Georgia Tech.

### **What does Georgia Tech Solar Racing do for the community?**

We have always felt it is important to share our mission of innovation and sustainability with the public, especially young students. We have demonstrated Endeavour at numerous events around Atlanta, including the Dogwood Festival and Georgia Tech’s Earth Day Celebration. Additionally, we host events on campus where other Georgia Tech students are invited to learn about the car. Our goal in the upcoming years is to visit more schools to foster an appreciation for solar energy and an interest in STEM education.



### **What is Endeavor and how has it changed in the past year?**

Endeavour is the first fully functioning, 100% solar-powered car raced by at Georgia Tech. Single junction silicon solar cells (17% efficient) are attached to the top of the aerobody made from carbon fiber. A steel chassis protects the driver and acts as the frame that holds it all together. Endeavour weighs in at a little less than 900 pounds with driver and has seen top speeds of 45 mph. All this runs on about 1.2 kW, or roughly the same power as a hair dryer.

In the past year, we redid most of the electrical communication system in order to add CAN bus communication (replacing a single micro controller with many integrated micro controllers). We also improved the energy density of the batteries and updated the battery management system circuit board. Endeavor is the best she has ever been!

### **What is the next big thing for Georgia Tech Solar Racing?**

We are excited to announce the design of our next car, SR-2. This project will give us a chance to innovate using the experiences of building Endeavor and apply everything we have learned as a team about building a solar powered car.

According to our current plans, SR-2 will have an aluminum 6061-T6 frame, carbon fiber aerobody, a Kevlar battery box, lithium iron phosphate batteries, a 99% efficient motor, state-of-the-art solar racing tires, magnesium wheels, and 21% efficient single junction space grade solar cells. We expect it to weigh around 400 pounds with driver (less than half of Endeavor's weight). With the help of our sponsors and our experienced team, we hope to be leading the way in student-run solar powered racing technology.

### **How can our sponsors continue to help?**

We would love to talk to you about continuing your sponsorship of Georgia Tech Solar Racing as we build SR-2. Sponsorships are off to a good start; we have secured a few excellent sponsorships for software and mechanical needs. However, we still have many opportunities to help. Please contact [piperhcerny@gmail.com](mailto:piperhcerny@gmail.com) or speak to any member of the business team if you would like to continue your sponsorship. Sponsor benefits continue on the next page. Current sponsors are listed on the last page.



## SR-2 Sponsor Benefits

### **Platinum:** \$10,000 +

- Large Company Logo placed prominently on solar race car
- Large logo on website, signs, banners, race trailer, merchandise, uniform, and other apparel
- Solar car available for display at company events (within 150 miles of Atlanta)
- Electronic copy of team resume book and opportunity to interact with team members
- Company exposure in media releases
- Tax recognition of donation

### **Gold:** \$5,000

- Medium-sized logo placed on solar race car, race trailer, website, signs, banners, race trailer, merchandise, uniform, and other apparel
- Solar car available for display at company events (within 100 miles of Atlanta)
- Electronic copy of team resume book and opportunity to interact with team members
- Tax recognition of donation

### **Silver:** \$1,000

- Company logo placed on team website
- Company name placed on team apparel and signs
- Solar car available for display at company events (within 50 miles of Atlanta)
- Electronic copy of team resume book and opportunity to interact with team members
- Tax recognition of donation

### **Bronze:** under \$1,000

- Company name placed on team website
- Tax recognition of donation

# GTSR Current Sponsors for Endeavor

## Platinum Sponsors



## Gold Sponsors



## Silver Sponsors



Bronze Sponsors - View at [www.solarracing.gatech.edu](http://www.solarracing.gatech.edu)