

# 2024 - 2025 Sponsorship Package



UCI Samueli School of Engineering University of California, Irvine

Email: afrmrkt@gmail.com | Website: sites.uci.edu/uciracing | Instagram: @anteaterformularacing



### Team and Competition 🔊

#### What is Anteater Formula Racing?

Anteater Formula Racing (AFR) is a student led 501(c)(3) Formula SAE - ICE design project at the University of California, Irvine.

Each year, our members engineer and test a formula style race car to compete in Formula SAE, a student design competition organized by SAE International. This event takes place the Michigan International Speedway in Brooklyn, Michigan.

#### What is Formula SAE?

The concept behind FSAE is simple - a fictional manufacturing company has contracted a student design team (us!) to build a sing-seat race car. As such, the prototype car must meet a list of restrictions, many of which relate to safety. The prototype is judged in a series of events, via a point system as follows (total points possible: 1,000):

Dynamic Events	Points
Acceleration	75
Skidpad	75
Autocross	100
Efficiency	100
Endurance	325

Static Events	Points
Business Event	75
Cost Report	100
Design	150

#### Preparing the next generation...

Our members apply theoretical knowledge through participation in FSAE and move into the workforce with practical, hands-on experience. Apart from using professional modeling and analysis software, our members learn how to solve complex problems that don't necessarily have clear solutions. At AFR, imaginative ideas are the core of what we do. AFR alumni go on to do research and work at the nation's leading technical insitutions:







Jet Propulsion Laboratory California Institute of Technology





NORTHROP GRUMMAN

> GLIDEWELL LABORATORIES

Honeywell

### Our Team's History 🗬

#### Mantis | 2017



Mantis was AFR's 2017 ICE car. Finishing 19th overall at the 2017 FSAE Lincoln competition. The car weighed 515 lbs and ran a Yamaha R6 engine.

#### Wraith | 2019



With another complete design, Wraith was 10% lighter than previous generations while also increasing power and downforce. Improved points scored in the Cost and Presentation Events at competition

#### P.P.E | 2021-2023



Peter the Pavement Eater competed in FSAE Michigan 2022 and was used for an extra year to complete extensive testing for 2024-2025 Gastly re-design

#### **Phantom** | 2018



Phantom was a complete redesign of the 2017 car, featuring the team's first aerodynamic package. Phantom finished 4th in acceleration, 13th in autocross, 17th in skidpad at FSAE Lincoln. It also finished 1st at SoCal Shootout at Adams Motorsports Park

#### <mark>Jinx</mark> | 2020 - 2021



Jinx was AFR's covid-19 car and made the change two the first two year car design in the school's history. The car featured a 2011 four-stroke, 600 cc Yamaha YZF-R6 engine, push rod suspension, and multi-element wings.

#### **- Gastly** | 2024-2025

Currently in development to be our best car to date! With extra time in design and manufacturing, we are aiming for new heights in competition with Gastly.

# Budget Breakdown 🕋

### Production

Chassis Tubes + Tube Bending	\$2000
Machining Costs (Suspension, Brake, and Steering Components)	\$6000
Engine + Tuning	\$4100
Tires	\$1460
Paddle Shifting Actuator	\$900
Electric Cooling System	\$250
Carbon Fiber Layup Material: foam for Molds, breather, vacuum, PPE	\$1000
Electronic Components (Sensors, Wire, Electronic Throttle Body)	\$300
Raw Materials and Hardware/Fasteners	\$1250
Total Costs	\$17,260

### Competition

Formula SAE competition Registration Fee	\$2750
Transportation to Competition	\$2500
Lodging and Food	\$1550
Miscellaneous Expenses	\$500
Total Costs	\$7,300

### Operation

Shop supplies and Tools	\$2750
Fluids and Chemicals (Gas, Oil, Brake Fluid)	\$1000
Local Transportation of Car to Events	\$500
Miscellaneous Expenses	\$1500
Total Costs	\$5,750

### Testing

Spare Parts for Testing	\$5000
UCI Lot Reservation for Track Day Testing (\$50/day * 25 track days)	\$1250
Total Costs	\$6,250



Anteater Formula Racing is entirely sponsor and donor funded, the projected budget for which is outlined above. Some of the highlights of this year's new design include:

- An electric cooling system
- A new exhaust design, paddle shifters
- Electronic throttle control
- An innovative lightweight suspension
- A new medal box that provides better driver feel

We are seeking sponsorship to allow us to outsource more components, such as our chassis tubes, for faster turnaround and much greater precision and accuracy. We have limited access to machining equipment and are only able to manufacture simple parts in-house.

A large factor of this year's car is the use of extensive testing. The more parts we can test before implementation, the more data we will have to ensure design is functional and safe. For example, P.P.E had a hub fail, even though the designed Factor of Safety was 6 and the FEA simulations showed no weak points. Having had the funding to order hubs in advance, test them, then make design tweaks before proceeding to competition would have eliminated this failure

We would like to have the engine professionally tuned this year. The engine uses a very advanced tuning program that goes beyond a collegiate level. Without professional tuning, our engine runs at lower power, consuming more fuel, and increases our chances of engine pre-detonation and backfire due to poor ignition timing.



### Benefits of Partnership 🕋

AFR is dependent on sponsorship and donations, meaning we are incredibly grateful to our sponsors for helping us see our dreams and goals come to fruition.

As a sponsor, you will help nearly 50 engineering students gain valuable real-world experience in application like research and development, manufacturing, project management, and marketing management. Your brand will also receive exposure from:

- Our affiliates from our prestigious university and other schools and brands associated with the FSAE competition
- Our social medias of more than 1400 followers and affiliates across multiple platforms
- The public through our attendance of various events with sponsor logos showcased on our car and apparel

We have various levels of sponsorship that be customized based on your needs + wishes. In addition, because Anteater Formula Racing is a 501c non-profit organization, all donations are tax-deductible. Please reference the following options and reach out to us if you have an questions.

\*Detailed breakdowns of what each team is working on are available upon request\*

### Sponsorship Levels 🕋

### Bronze | < \$1,000

- Logo on website + T-shirt
- Sticker on car x2 (increasing size + quantity with sponsorship level)
- Mentions on social media platforms
- Frequent team updates and announcements

# Silver | \$1,000 - \$2,499

- Logo on website + T-shirt / Polos
- Sticker on car x3 (increasing size + quantity with sponsorship level)
- Mentions on social media platforms
- Frequent team updates and announcements
- Access to student resume database

## Gold | \$2,500 - \$4,999

- Logo on website + T shirt / Polos
- Sticker on car x3 (increasing size + quantity with sponsorship level)
- Mentions on social media platforms
- Frequent team updates and announcements
- Access to student resume database
- Access to subteam / management meetings (in person or virtual)

### Carbon Fiber | > \$5,000

- Access to ALL previous sponsorship level's benefits
- Option to use car at promotional events + photo opportunities
- Guided tour of the UCI Vehicle performance ENGR lab and car

\*Custom sponsorship experiences are available upon request\*



## **Thank You Sponsors!** Calspan AIRTECH GAMMA TECHNOLOGIES 181 **GendCutGend** METAL CO. DiqiKey **SIEMENS** Glidewell Hoositt **UROP** Henkel

rapidharness

Email: afrmrkt@gmail.com | Website: sites.uci.edu/uciracing | Instagram: @anteaterformularacing