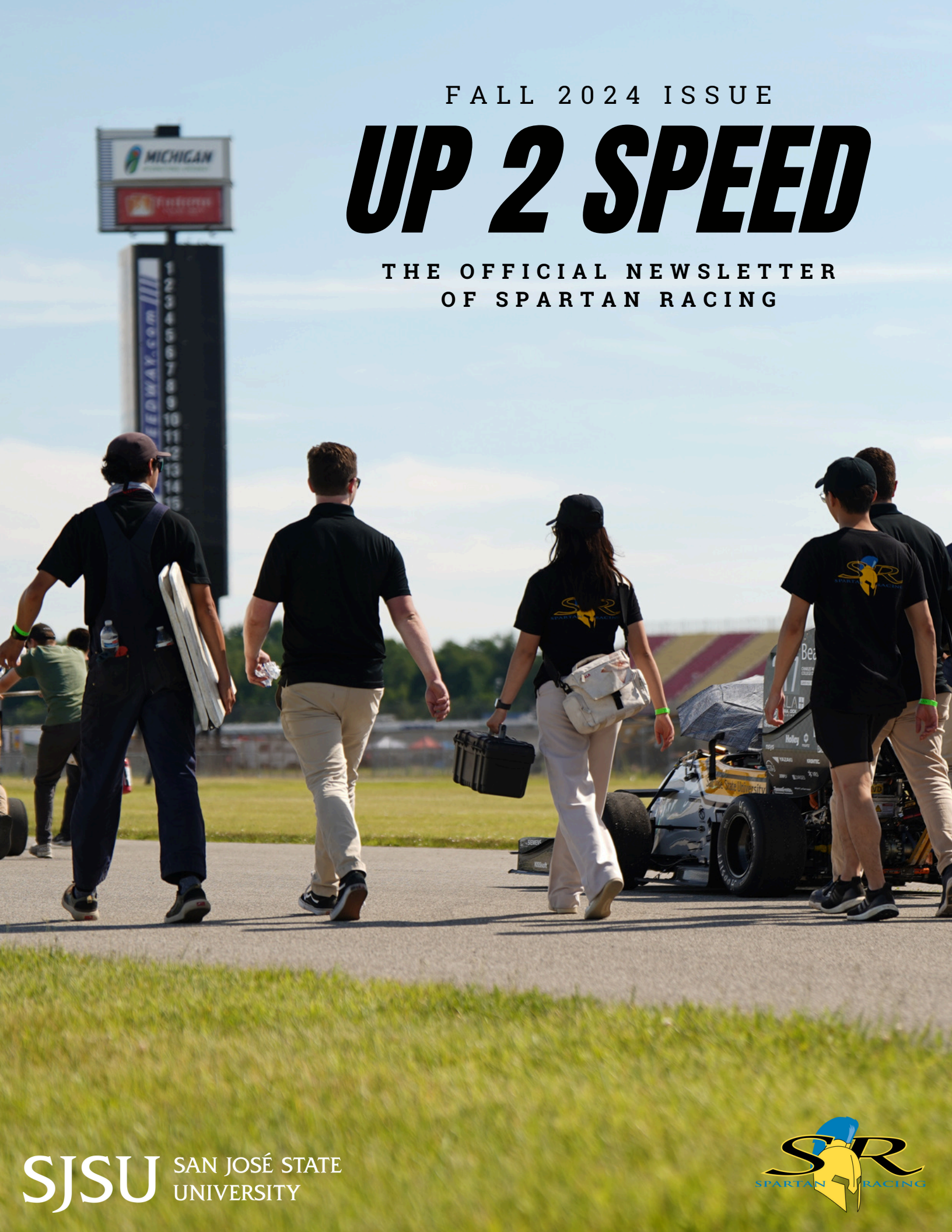


FALL 2024 ISSUE

UP 2 SPEED

THE OFFICIAL NEWSLETTER
OF SPARTAN RACING





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WELCOME TO THE 2024-25 SEASON

Dear Sponsors, Friends, Family, and Supporters,

We wanted to take a moment to introduce ourselves as the new Chief Engineer and President of Spartan Racing. Rahul Shetty and Patrick McGowan have left us with big shoes to fill, and we are confident we can live up to them and leave our own mark on the team as individuals, together.

Coming off of a highly successful season with SR-15 makes us optimistic for the future. We have a group of highly talented team members with us, in addition to a massive group that provides us with unwavering support. This fuels our determination to be even better and display that in competitions. Without you all, we would not be as strong as we are. Thank you.

Our results in Michigan and SoCal Shootout this year are a testament to the growth and passion of Spartan Racing as individuals, and as a team. Just like we have learned from SR-14, we will learn from SR-15 and its season to make our new car even better.

We look forward to sharing our continued development over the year, as well as pushing the team farther than it's ever been before.

Here's to another great season.

Warm regards,
On behalf of the team,

Kai Rehbinder (Chief Engineer)
Robine van Veen (President, Business Lead)



MEET THE LEADS

This year, the leadership team has some new and some familiar faces. We are excited to announce the following leads for the 2024-25 season:

SR-16's Chief Engineer for the season is Kai Rehbinder, who joined the team during SR-13 and SRE-6 as a shifting designer. After this, he was the team's project manager and chassis designer for SR-14, before becoming one of SR-15's award-winning module designers.

Robine van Veen is the team's President and Business Lead. This is her second year on the team, after having been on the Business Team her first year.

Clarence Choi, the continuing Treasurer, has been on the team for three years, having also been SR-15's brake designer.

This year's Project Manager is Kenny Nguyen, who joined in 2021 and designed the fuel system that year, followed by designing drivetrain components the following years.



Keola Sylva has assumed the position of Suspension Lead, having been on the team for three years. He worked on the steering system for SR-14 and SR-15 as a designer. Keola is looking forward to dialing in the setups for each event to be the fastest on the track.



Matthew Abdallah is this year's Aerodynamics Lead, joining the team four years ago. He focused mainly on composites while he was a designer. Matthew's goal this year is to win first place overall in the annual competition in Michigan.



Kanoa Nakama has been on the team for three years. While on the team, he worked on both the charger and battery safety electronics for SR-14 and SR-15. Kanoa is looking forward to building off of SR-15's success to fine tune the powertrain system for SR-16.



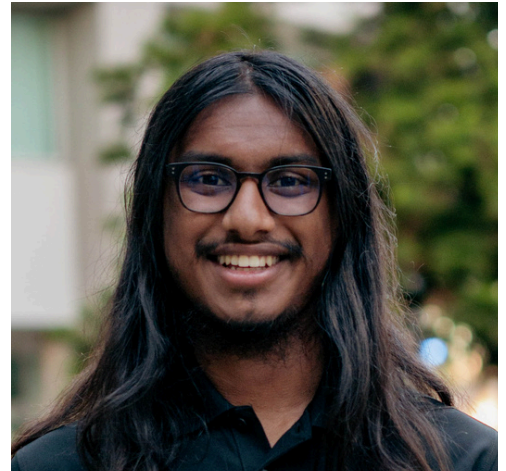
Kaden Golda joined the team during SR-14 with a heavy focus on systems integration and wiring harness development. His main goals are to improve the mechanical integration of our harness and components, improve previous PCB designs, and getting lots of testing time for this season.



Carlie Yem joined the team last year, working with powertrain and software, redesigning the dash UI and helping out with the battery management system, before becoming Software Lead. Carlie is determined to push the software boundaries on the car in order to better integrate new systems, and optimizing old ones.



Rahul Shetty is once again on the leadership team, having been on the team for five years and being last year's Chief Engineer. He returns this time as Chassis Lead, hoping to work further on continuing to refine the chassis design this year.



Ely Feldsher has been with the team for five years. He designed multiple suspension components, such as anti-squat brackets, anti-roll systems and uprights. He is joining us this year as Vehicle Dynamics Lead. One of Ely's goals this year is to improve data analysis and use metric-based goals to ensure peak vehicle performance.





UNVEILING

This year, we were fortunate to hold the unveiling of our car at the Candy Store Car Club! We worked together with the Spartan Racing Baja team to host an event for sponsors, alumni, family and friends, to celebrate the hard work and dedication that has been put into both the Formula and Baja vehicles over the last year before sending off our car to Michigan.

Our legacy cars sat nestled in between old time classics, such as a LaFerrari or the Mercedes 300SL. SR-15, for the time being, sat next to Baja's SRB-23 under a large black sheet. Guests were greeted at the entrance, were given a nametag, and then were told a little bit about Spartan Racing history through the years.

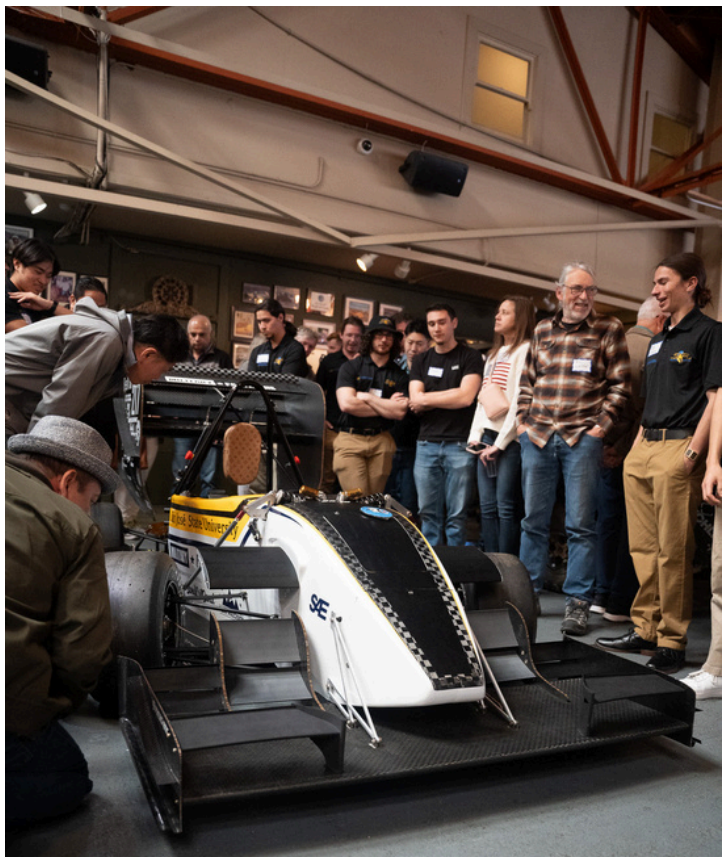




SR-15 Chief Engineer Rahul Shetty and SR-15 President Patrick McGowan held a speech around an hour into the event, where they detailed our long history of designing and manufacturing vehicles since our foundation in 2008.



The presentation was followed by both teams pulling the cloth off of their respective cars, to reveal the work underneath.



We are incredibly grateful for the Candy Store Car Club for their generosity and hospitality.

Additionally, we extend a warm thank you to all alumni, sponsors, friends and family who were in attendance. SR-15 could not have been built without your support.



MIS 2024

June 9th to June 15th marked our annual journey to Michigan for the Formula SAE Electric competition. A handful of team members drove across the country to ensure that SR-15 arrived safely.

We took two minivans, an SUV and a boxtruck containing SR-15 and all of our tools to Michigan. The trip in total spanned across three days and seven states.

Upon arrival, we were allowed to set up a pit of sorts in order to work on the car, to ensure it was all ready to go for competition the next day.





During the season, we followed two main goals to keep us moving forward and motivated:

- 1. **Get into the top 10 at the competition**
- 2. **Get into Design Finals**

On the 12th, we passed our accumulator technical inspection with minor issues which were quickly solved.

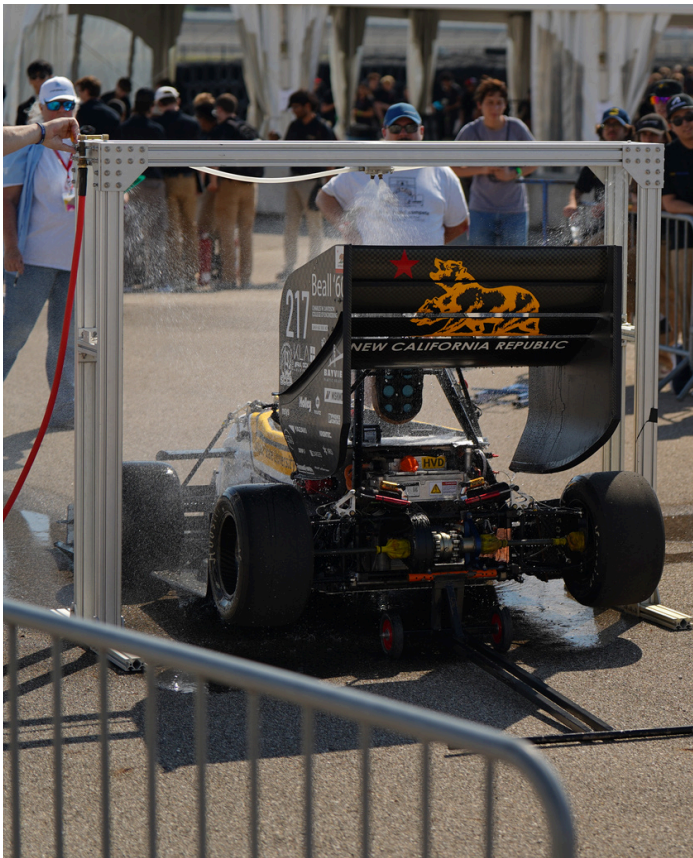
That same day, two other technical inspections opened, which we also passed on the first try that day.





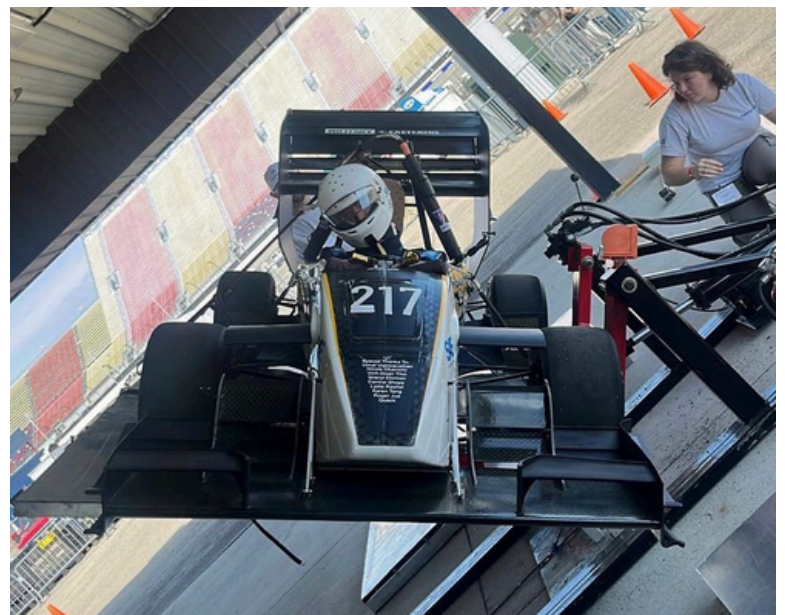
The following day, the final three technical inspections became available.

SR-15 and our driver were prepped for the tilt test, seen below. After putting the sticker on, the car was rushed to the rain test, which involves the car being sprinkled with water for two minutes to ensure all electrical systems are in order.



After two long minutes, we received the green light and the sticker.

The final inspection to take place for our vehicle was brakes. We passed with flying colors! This now also meant the team was the first to complete all technical inspections - and we were ready to move onto our dynamic events the next day.





AutoX: 49.226 seconds

This event involves measuring how quickly the car goes through the autocross track.

Position: 6th



Skidpad: Right: 5.427s | Left: 5.143s

This event involves measuring lateral g-forces imposed on the car on a figure eight track.

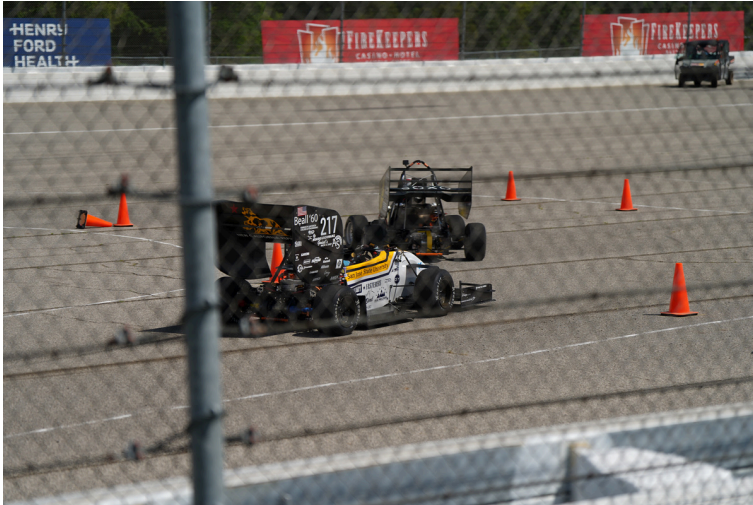
Position: 11th



Acceleration: 4.422 seconds

This event involves measuring how quickly it takes the car to go from point A to point B.

Position: 12th

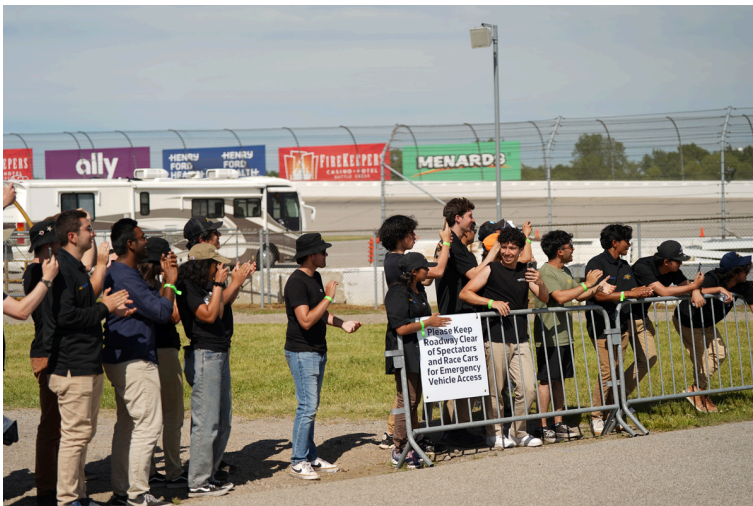


We progressed to Design Finals the day after the Design event. Our designers gave strong presentations to a number of industry professionals and leaders, whom were impressed with SR-15's design.



On the 15th, we participated in the final Dynamic event (Endurance), involving 22 laps on a course with four other cars. We ended up lapping two vehicles.

The awards were held the same day. We are pleased to announce the following results:



- 1st Cummins Innovation Award**
- 2nd Cost Presentation**
- 3rd Endurance**
- 5th Overall**
- 7th Design**



SoCal Shootout

We took SR-13 and SR-15 to compete in the ICE and EV class, respectively. This weekend solidified our place as the **fastest EV SAE vehicle in California.**

After a roadtrip from San Jose, the team arrived in Willow Springs and set up the cars and our pit. Saturday, November 9th, we spent the day preparing the cars for the race and practicing.

The following day was race day! Despite some temperature issues, our driver Milos stayed cool and set the fastest lap time, giving us the **fastest time** on the track at **43.87 seconds**. SR-15 won **first place in the EV category.**

Although SR-13 was on track to set the second-fastest ICE time, camshaft issues prevented it from finishing the final heat.



SR-13 and SR-15 right being prepared before their respective heats.



Thank you!



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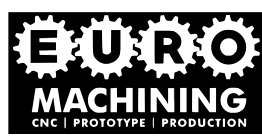
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