WINTER 2025 ISSUE



THE OFFICIAL NEWSLETTER OF SPAR<mark>TAN RACING</mark>

SJSU SAN JOSÉ STATE UNIVERSITY







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# **GONTENTS**

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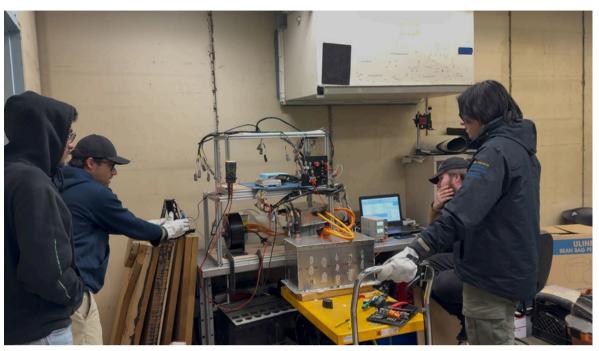
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KISSsoft BLUE ORIGIN

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SIEMENS

#### **MANUFACTURING & FIRST DRIVE!**



Motor spin on test bench.

Dear Sponsors, Friends, Family, and Supporters,

The team has been moving at lighting pace throughout the manufacturing process, accomplishing rolling car within the first month of school being back. The Electronics and EV-Powertrain teams have already completed fist spin on test bench in preparation for the final push for SR-16's first drive.

We're ready to tackle the rest of manufacturing and can't wait for the many testing days ahead of us.

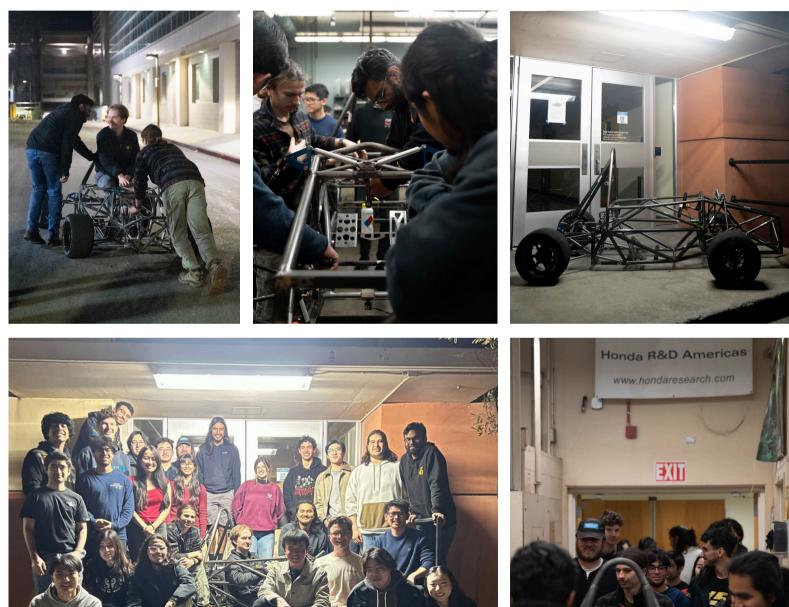
Warm regards, on behalf of the team,

Carlie Yem (Software Lead)



### Rolling Car

This year, we achieved a rolling car before the end of February and within a month of school starting up again from the holidays. We wanted to take a moment to share our rolling car night, as we look forward to announcing a rolling car very soon.



#### DAY OF GIVING: ENERGIZING THROUGH INNOVATION

This year, we are aiming to raise **\$10,000** with your help. This year's Day of Giving event will run from March 11th to March 12th, running for a total of 1,857 minutes - representing the year that San Jose State University was founded.

Your support as a donor will directly impact our ability to purchase key materials needed to build an award-winning car. Whether it's a financial contribution or sharing our campaign with others, every bit of support helps us achieve our goals. By donating, you become an integral part of Spartan Racing, empowering the next generation of engineers, designers, and innovators. Thank you for helping us drive success!

TIER ONE PitCrew

TIER TWO Driver's Seat

TIER THREE Precision

TIER FOUR Pole Position

Victory Lap

ERF

#### HELPS PURCHASE SOME SMALL COMPONENTS FOR THE CAR

DONORS AT THIS LEVEL TAKE THE WHEEL AND DRIVE OUR TEAM TOWARD SUCCESS

HELP PURCHASE TIRES FOR AN AWARD-WINNING VEHICLE

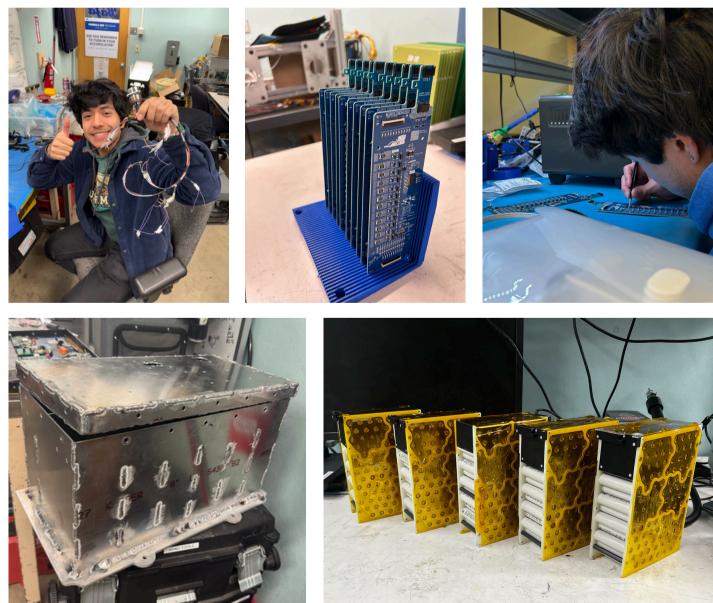
DONORS AT THIS LEVEL TRULY HELP PUSH THE TEAM TO A TOP-3 FINISH THIS YEAR

HONORY MEMBER OF THE TEAM! POWER THE CAR BY NAMING A MODULE AFTER YOURSELF.

## Manufacturing: Powertrain

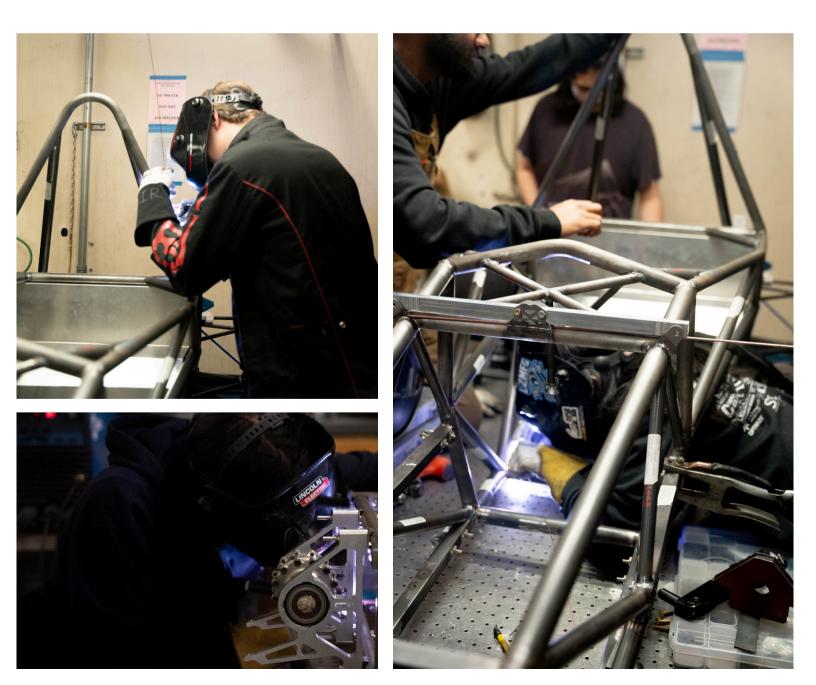
EV-Powertrain has been making steady manufacturing progress with powerpacks and accumulator manufacturing, arranging cell batches into modules, bending busbars and installing the harness and FR4 insulation. Five modules have been assembled out of the eight needed for the accumulator.

The Final Drive designers and interns have been collaborating with Chassis in order to mount their system, which is ready to go soon.



### Manufacturing: Chassis

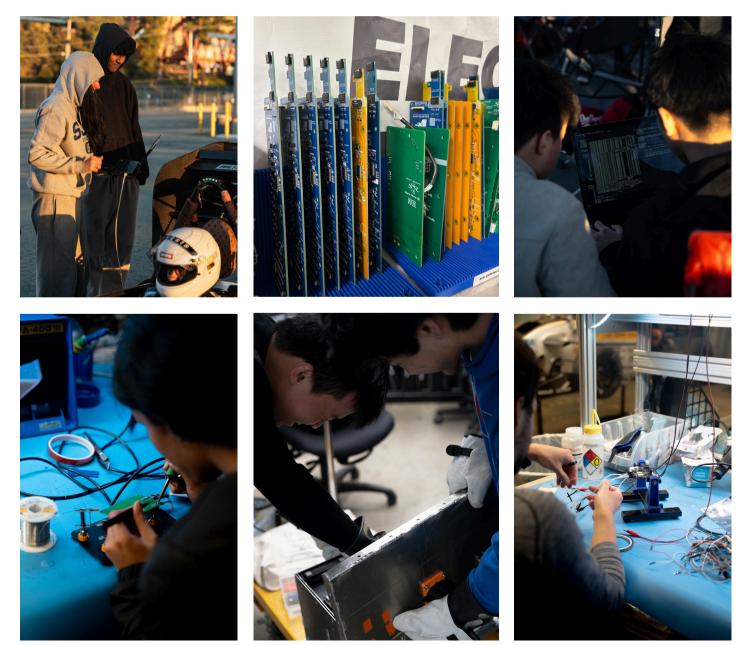
This month the Chassis subteam was able to make great strides in the manufacturing process. They were able to fully weld all the tubes into place and most brackets were bent and welded in their proper locations. In addition, Chassis has worked closely with the Suspension team to weld all of the suspension mounting points on to the car such as the bell crank, shock tower, and toe link brackets.



## Manufacturing: Electronics/Software

Electronics has been assembling PCB's and working on the Custom BMS system. Over the last month, they've gotten a lot of validation done, successfully test-benching SR-16's wiring harness.

The TTD has been assembled, new TSSI strips are made, and the E-stops have been wired out. The Software subteam was able to successfully test different codes at PnR this month, leading to great movements forward for SR-16!



## Manufacturing: Suspension

The bellcranks have been welded, along with the tie rods, push rods and the ARB lever arms. The rear toe link brackets have been jigged for Chassis to weld, in addition to the front and rear bell cranks, shock tower brackets, ARB mounts, and steering support. The brake calipers have been cleaned, rebuilt, and the rotors have arrived.

Many of the team's new members have been coming in to assist with creating inserts and other parts in the shop, and we're excited to see them continue to progress and grow on the team.



### Manufacturing: Aerodynamics

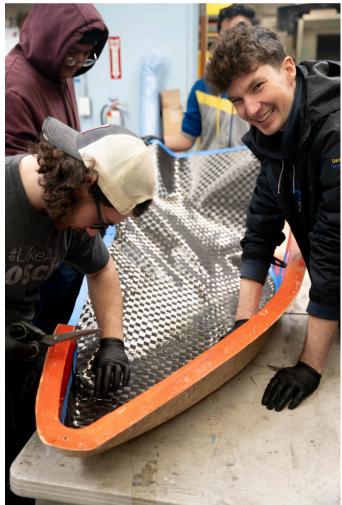
The rear wing is starting to come together as of this month! Currently, every flap (with the exception of the main) weighs just barely over 2lbs (untrimmed).

Mid-February, Aero also achieved the completion of 1/3 of all of aerodynamics manufacturing.







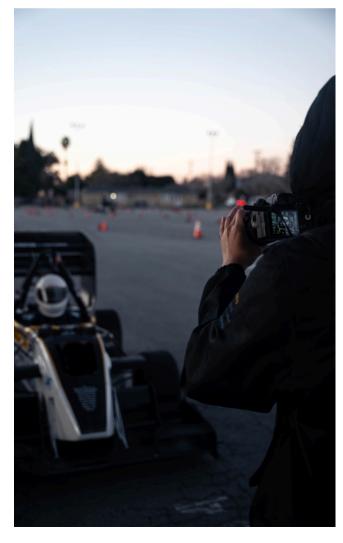


#### **Updates: Business**

This month, business hosted a thrift fundraiser event, which raised hundreds of dollars for the team. Additionally, the team took SR-15 to our sponsor, Cadence, to show the car which they have been supporting.

We're trying to up our media game this year - so we took SR-15 up Highway 9 in the mountains to get to Alice's Restaurant, snapping some pictures of our beloved car next to the team's favorite breakfast spot.

And lastly, of course, Business has been working on this year's the Day of Giving campaign.





Thank you!





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