

24

UNIVERSITY  
OF TORONTO  
FORMULA  
RACING

# UTFR

*University of Toronto Formula Racing*





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FORMULA  
RACING

## THIS MONTH IN THE SHOP



New year new newsletter! The team has been on overdrive cranking out UT24 in recent months. But that's not all – we've got our serious hats on, diving into the nitty-gritty of planning, prep, and nailing those FS tests, including the ones lined up for FS East, Spain, and Germany. It's all in the works as we gear up for a full-on takeover of the 24 competitions season.

Speaking of looking forward, our unveiling day is approaching quicker than ever and we would love to have you join us as we celebrate our 25th anniversary of racing on March 22nd, stay tuned for more details.

## TECHNICAL DEVELOPMENTS



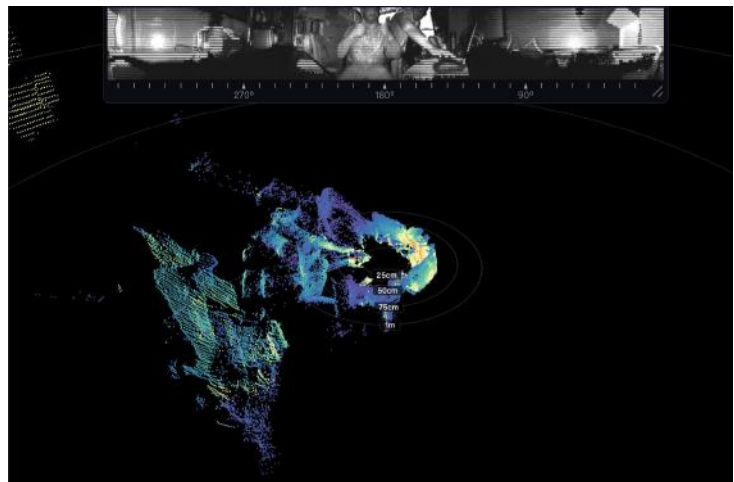
### Low Voltage In Segment PCB

Our Low Voltage In-Segment PCB is in action! Placed on the low voltage battery, it is responsible for keeping tabs on temperature and voltage reading from our battery cells, ensuring stability and preventing spontaneous explosions or other failures. On the right, you can see a behind-the-scenes with our Controller Lead, Nicholas Burley. He is

setting up a test where he attaches the Low-Voltage In-Seg to the battery and reads voltages using the car's rear controllers.

### Driverless Perception

Our Driverless perception team has been going all out to integrate our latest hardware upgrade into our autonomous system: The Ouster OS-1 LiDAR. The impressively new sensor brings game-changing resolution to the table, taking our cone-spotting precision to the next level. It's in sync with our camera object detection module which gives us a more robust localization capability like never before.







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## THIS MONTH IN ONE NUMBER

198

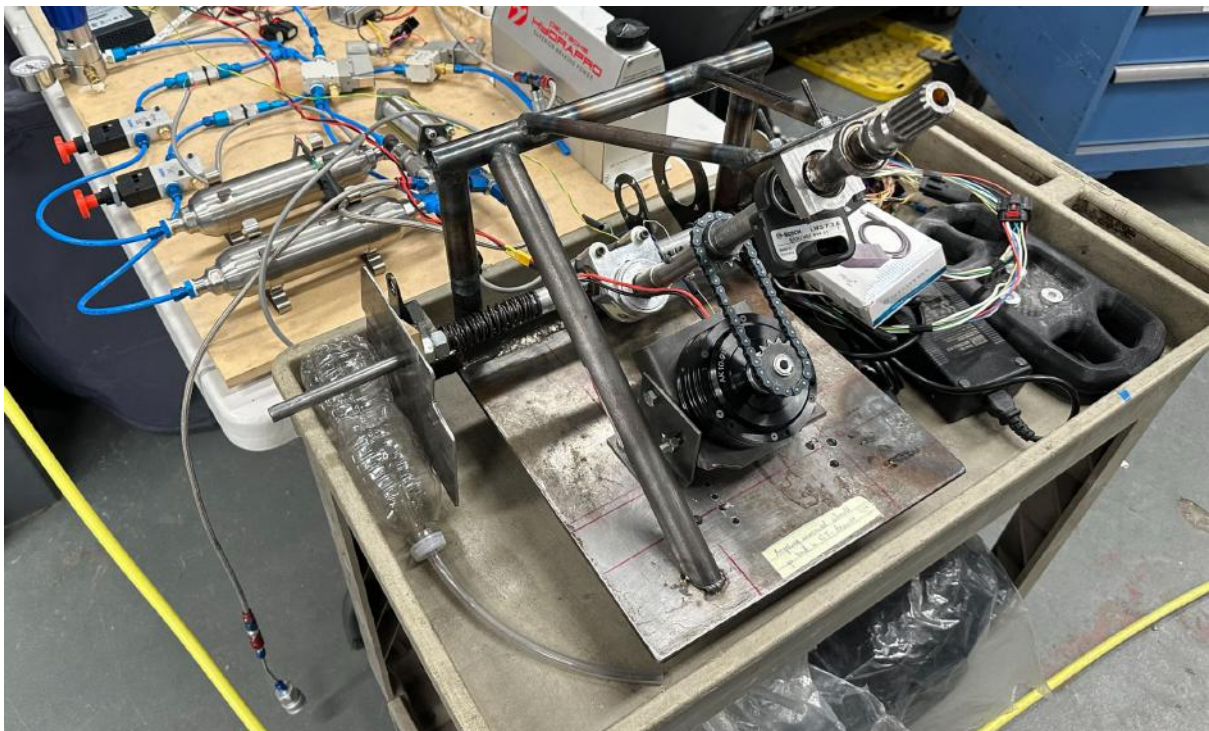
It's been a whopping 198 days since our UT23 race car graced our shop! The thrill is real as we welcome back one of our championship winning cars back on campus.

Check out [this link here](#) to catch a glimpse of the unboxing process!

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## SPONSOR

### CubeMars



CubeMars is a tech-focused company excelling in motor research, production, and sales. We are grateful for their generous support in supplying the powerful AK10-9 motor for our autonomous steering system! We're buzzing with anticipation for the motor's performance in the upcoming competitions. Take a peek below at the motor undergoing meticulous testing in our bench testing rig - a crucial step before it is integrated into UT24.



U N I V E R S I T Y  
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## LOOKING AHEAD

### Unveiling

It is almost time for the big reveal! On March 22, we're unveiling the UT24 in Toronto, and you are all invited! No formalities, just a chance to meet the team, see what we've been up to and get excited for the competition season. Save the date, more details coming your way soon!

A promotional poster for the UT24 unveiling event. The poster has a blue gradient background with a black border. At the top center is the large 'UT24' logo. Below it, the word 'UNVEILING' is written in bold, uppercase letters, followed by 'PRESENTED BY' in a smaller font. The 'UTFR' logo is prominently displayed, featuring a stylized white sailboat icon to its right. Below the 'UTFR' logo is the text 'University of Toronto Formula Racing' in a smaller, italicized font. At the bottom, the text 'PLEASE JOIN US IN TORONTO TO UNVEIL OUR NEWEST VEHICLE FOR OUR 25TH ANNIVERSARY OF RACING' is written in bold, uppercase letters, followed by the date '03 • 22 • 2024' in a large, bold, black font.

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