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A QUARTERLY NEWSLETTER CELEBRATING TUSTIN HIGH SCHOOL'S
TECHNOLOGY & ENGINEERING PROGRAM

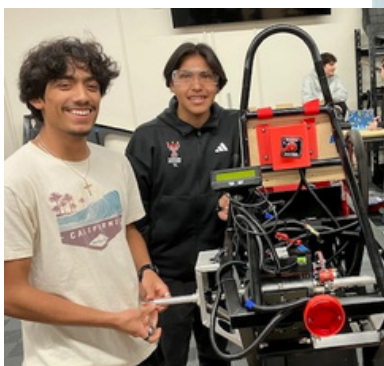
Capstone Projects Underway!

For the first time in two years our capstone course students are able to design and build their projects in our amazing new shop space.

This year we have some very cool projects including a motorized couch, a Tiller version of Zoltar (from the movie Big), scratch-made electric guitars, an EV restoration project and three competition electric vehicles. Join us on May 19th for our annual T-Tech showcase and see all of these amazing projects in person.

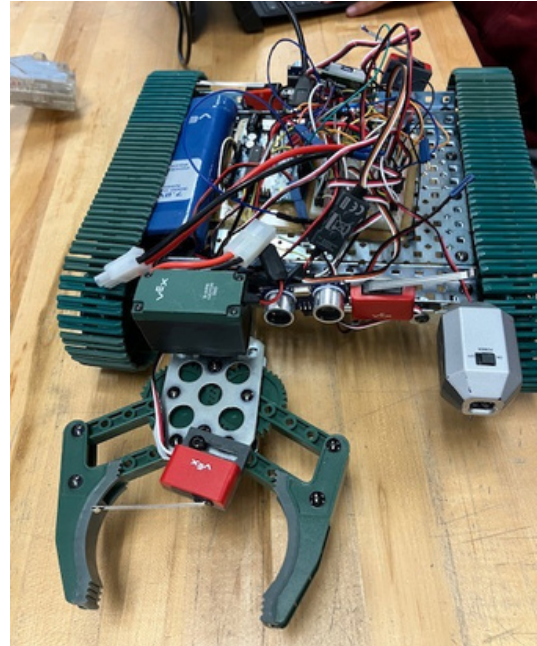
A Different Kind of CAD

We all know that CAD stands for Computer Aided Design, but have you heard of *Cardboard Aided Design*? While taking a break from 3D modeling, our students took on the challenge of creating with their hands - some for the first time ever. Cardboard is cheap and plentiful and a great way to exercise some hands-on creativity for our Introduction to Engineering students. Even the original Dyson vacuum concepts were built with cardboard. It is harder than it looks! Some hot glue and careful slicing can get you pretty far.



Not really robotics

Robotics competitions are not part of T-Tech. However, it doesn't mean that we can't build a robot! Students in our 2nd-year Principles of Engineering course have been using Artificial Intelligence to help them code a variety of electronics circuits and microcontroller projects faster than ever before. As part of the final section of our electronics unit, our students are repurposing old VEX robotics parts with open source electronics - integrating LCD displays, ultrasonic sensors, switches, LEDs and more into a semi-autonomous vehicle like this little tank!



Alumni Spotlight

In this issue, we highlight Daniel Gonzalez, T-Tech class of 2016. The summer before his senior year Daniel passed the SolidWorks Certification exam (CSWA) and he was hooked! He went on to pursue a Bachelor's in Mechanical Engineering at Cal State Fullerton, where he served as 4WD Powertrain Lead on the CSUF Baja Racing Team, helping design the university's first four-wheel-drive vehicle. After graduating, Daniel joined Hyundai Motors as a Product Development Engineer, collaborating with Hyundai, Genesis, and Kia to design and validate automotive accessories. Today, he works at Quick Quack Car Wash as an R&D Mechanical Engineer, developing and testing new soap delivery systems that enhance the quality of the wash while ensuring full safety compliance. Way to go Tiller!



Daniel Gonzalez, with a 10hp oil pump!

2025 Summer Internships

It is not too late! Applications for the TUSD Career Pathway Internship program are due on February 16th. Juniors, make sure to get your Internship applications submitted by Monday!

Upcoming Events

Parent Booster Mtg - April 15th 6:00 pm
EV Challenge - May 9th 9:00 am
T-Tech Showcase - May 19th 6:00 pm

You can contact Mr. Hernandez, T-Tech's lead teacher directly at ehernandez@tustin.k12.ca.us