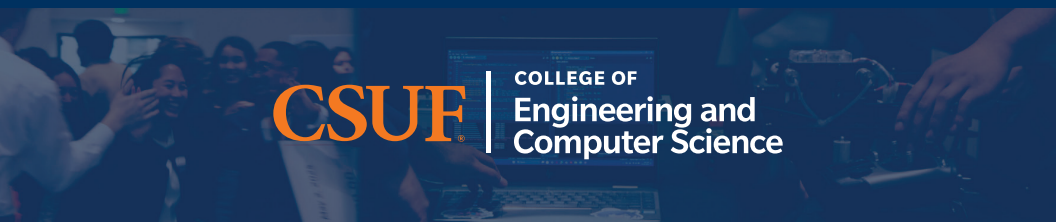




*ECS STUDENT PROJECT*  
**Innovation Expo**

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**Friday, May 1, 2026**



**CSUF**

COLLEGE OF  
**Engineering and  
Computer Science**

# We are delighted to host the following industry and faculty experts as our **2026 Expo Judges:**

**Todd Abel\***, Edwards Lifesciences  
**Matthew Arroyo**, Griffith Company  
**Peter Bilello\***, CIMdata  
**Melody Brown\***, Raytheon (retired)  
**Andrew Casey**, Campos EPC  
**Yoonsuk Choi+**, Cal State Fullerton  
**Yalina Couling\***, Edwards Lifesciences  
**Flavio da Cruz**, Southern California Gas Company  
**Chrystal De Arcos**, Campos EPC  
**Eric Evans**, Anduril Industries  
**John Faller+**, Cal State Fullerton  
**Pratanu Ghosh+**, Cal State Fullerton  
**Jeffrey Guerra**, IPassword  
**Ty Jones**, Campos EPC  
**Mira Kim+**, Cal State Fullerton  
**Paul Lindberg\***, Medtronic  
**Rakesh Mahto+**, Cal State Fullerton  
**Aaron Mendis\***, Edison International  
**Joshua Mitchell\***, Apple  
**Ryan O'Leary**, Disneyland  
**Anand Panangadan+**, Cal State Fullerton  
**Bill Parente**, Fluor Corporation  
**Sean Ramirez**, Disneyland  
**James Ribbe\***, Raytheon  
**Michael Riley**, ABS Consulting  
**Christopher Ryu+**, Cal State Fullerton  
**Jonathan Schinowsky**, Anduril Industries  
**David Segura\***, Boeing  
**Michael Stragier\***, JPL NASA  
**Garrett Struckhoff+**, Cal State Fullerton  
**Daniel Tchai\***, Rivian  
**Marc Velasco\***, IBM

# We would like to thank and acknowledge our **Dean, Associate Deans, and Expo Event Organizers:**

**Sang June Oh**, Interim Dean  
**Chean Chin Ngo**, Associate Dean  
**Kiran George**, Associate Dean  
**Dr. Sagil James**, ECS Mechanical Engineering  
**Dr. Ankita Mohapatra**, ECS Electrical & Computer Engineering  
**Dean's Office Staff**, College of ECS

\* CSUF alumni | + CSUF faculty

# Thank you to the 2025–26 ECS Corporate Partners\* for your support!

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## A special thank you to the 2025–26 Platinum ECS Corporate Partners!



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Golden State Tech. Inc.



**Samueli**  
FOUNDATION



Hope RxX  
Foundation

\*as of April 24, 2026



## Schedule of Events

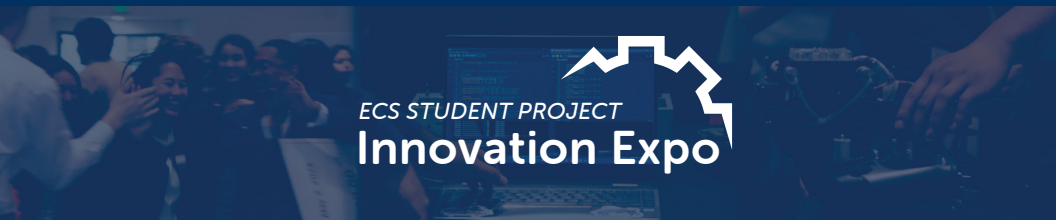
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**11AM** Expo Opens

**12PM** Lunch in the Atrium

**1:15PM** Awards Ceremony

**2PM** Expo Concludes



ECS STUDENT PROJECT  
**Innovation Expo**

# Civil & Environmental Engineering

## **I-5 / Ortega Highway Intersection**

Table 26 – Maxwell Stevens, Diego Lara, Carlos Martinez, Leonardo Sanchez

## **Mixed Residential Structure**

Table 34 – Michael G. Pagaduan, Jr., Garrett Treloar, Tristan De Leon, Jostephen Perez

## **Smart Monitoring of Portland Limestone**

Table 43 – Angela Camacho Sixto, Julia Hamblin, Phuc Phan, Ha Le

## **The Placentia Metrolink Station**

Table 52 – Lily Chavez, Christine Tawfik, Moises Escamilla, Fatima De Avila

## **The Torch**

Table 54 – Jenny Patel

## **Simpson Cadillac Car Dealership**

Table 55 – Jagis Michael Garcia, Eric Magana, Pierce Tran, Stanley Sin

## **Pier B On-Dock Rail Support Facility Expansion**

Table 59 – Sasha Billedo, Giovanni Catalano Trujillo, Omar Rahmany, Jacob Robles, Jordan Abu Zubidah

## **Mamba Pedestrian Bridge**

Table 60 – Brandon Contreras, Johnson Ejim, Anthony Medina, Nancy Lopez

## **SoCal Water Reliability**

Table 65 – Jason Saiz, Jesse Jones, Mark Saba, Thomas O'Brien

# Computer Science

## **Duckgeon Master**

Table 7 – Matthew Garabedian, Edgar Vergara, Hieu Phan, Brian Cam Vuong

## **Axis**

Table 9 – Emma Gomez, Aidan Williams, Chung Tran

## **Artificial Interaction**

Table 12 – Jason Palomino, Kieren Armas, Richard Trinh, Katherine Sutandar, Andy Nguyen

## **BACK-J**

Table 13 – Justin Hoang, Kent Nguyen, Austin Georges, Christian Beshara

## **Evergarden**

Table 22 – Liyuhan Zhou

## **Facial Recognition-Based Smart Door Access System**

Table 24 – Lucia Yanez, Gabriella Amedu, Kush Bajaria, Adonis Jimenez, Ian Akubu, Tommy Dinh

## **GeoCORK**

Table 25 – Kayla Gutierrez, Raquel Cruz

## **Foresight**

Table 28 – Noah Scott

## **The 20k Project**

Table 37 – Thai Vuong Long Nguyen, Edgardo Lopez, Megan Martinez

## **PitchSense**

Table 38 – Logan Brenner, Yuchen Chung, Dulce Funez, Carlos Secas, Erl-John Tauto-An

## **RTX – Signal AURA**

Table 39 – Jacob Fishel, Arai Leyva, Alexander Koo, Kenny Garcia, Owen Rotenberg

## **SonarX – Evidence-Chain**

Table 46 – Minjae Kim, Hooriya Muhammad, Brandon Fraijo, Uzair Hamid, Mohammad Miah

## **RTX – Smarter Scanning for Internet-Scale Research**

Table 47 – Max Rivas, Jodee Anne Pagunsan, Demi Chen, Christian Ziobro

## **Voice Based AI Mental Health Companion**

Table 58 – Atharva Kurumbhatte

## **Machine Learning Enhanced Streaming Communication**

Table 64 – Nicklaus Marietta, Dylan Wong, Benjamin Lac, Michael Ngo

## **Slide Kick**

Table 66 – Arthur Lee

# **Electrical & Computer Engineering**

## **Auto-Proxi Guard**

Table 10 – Jeric Lovgren, Alex Cisneros, Fernando Flores, Christopher Salgado

## **Spi-door: The Smart Door System**

Table 18 – Jacquelin Munoz, Howard Horning, Keith Geimer, Victor Mora

## **Quadconn**

Table 30 – Dylan Ruiz, Ben Le, Alexander Martinez, Jonathan Olivares

## **Solar Tracking Panel**

Table 36 – Jason Camero, William Buhler, Jayson Diaz , Austin Stangl

## **SpeakSight**

Table 48 – Vanessa Iwaki-Honore, Annayie Garcia, Mariana Vazquez, Kacie Lee

## **Spice Sense**

Table 49 – David Monterrosa, Jaylin Mai, Barbara Hawash

## **Underwater Remote Operated Vehicle**

Table 51 – Jackie Gong, Jacob Gomez, Libin Jian, Justin San Gil

## **Smart Water Skimmer**

Table 53 – Neil Sorto, Nabil Reza, George Mikhail, Tony Pham

## **StarChu – The Smart Star Capture and Tracker**

Table 61 – Rei Anton Zaraspe, Katelyn Mercene, John Le

## **Modular Game Controller**

Table 62 – Jana Sobocinski, Robert Le, Manuel Bravo, Bryan Avila

# **Mechanical Engineering**

## **Titan Green Hydrogen Drone**

Table 4 – Armando Barajas, Nick Martin, Jacob Scruggs, Gonzalo Sanchez

## **Solid-State Hydrogen Speedboat**

Table 6 – Sofia Vargas, Brent Lee, Agustin Gonzalez, Ghazal Rastegar

## **Arboretum Debris Filtration and Removal**

Table 17 – Gwendolyn Megow, Sarah Hamilton, Taylor Mosher, Joel Ruvalcaba, Amir Shaibi, Maxwell Weissenberg

## **Wheelchair Curb Climber**

Table 29 – Usama Albadarin, Preston Morawski, Marco Lomeli

## **Automated Post-Print Plate Separator for 3D Printers**

Table 31 – Nicolas Chvilicek, Antonio Ramos, Kyle Balder, Tyler Norgaard

## **CSUF Machine Shop: Waterjet Maintenance Tool**

Table 33 – Omar Edgar Martinez, Bryan Gallardo, Anthony Leal, Brandon San, Marcus Wagner

## **CSUF Arboretum Children's Garden Interactive Device**

Table 44 – Anthony Truong, Osviell Lopez Morales, Ruth Lopez, Kevin Khuu

## **Underactuated Three-Fingered Robotic Grabber**

Table 56 – Jasmine Yang

# **Corporate-Sponsored Projects**

## **Operational Technology Security Assessment**

Table 8 – Samantha Ahorro, Ryan Hartwig, Matthew Garabedian

## **Edward Lifesciences – Non-Destructive Tissue Bending Stiffness Testing**

Table 11 – Mark Stoffel, Logan Kim, Anthony Vazquez, Eduardo Hernandez

## **Cretebid**

Table 14 – Brandon Kim, Jason Khau, Antoan Nguyen, John Paik

## **Edward Lifesciences – Leaflet Design Tool**

Table 15 – Fiona Keaney, Saloni Joshi, Sidney Tovar, Caitlin Chau, Andrew Chang

## **Edward Lifesciences – MITRIS 2.0**

Table 16 – Gustavo Mejia, Tristan Ridge, Kent Alatorre, Vicente Morales

## **RTX – Autonomous Vehicle Competition Project**

Table 19 – Jessica Velez, Eddie Viscarra, Brian Nguyen, Ashley Cuatlayotl, Julianna Betancourt, Chloe Chen, Alan Hinojo, Matthew Nguyen, Daniel Salas, Isaac Song, Ryan Li, Luis Carpio, Kenny Son, Analiese Gonzalez, Anna Stafford, Arianna Azcarraga, Joshua Park, Iracema Cobian

## **Disney – Roller Coaster Brake Tester**

Table 21 – Darim Yaqoob, Kweku Abban, Jesse Rutti, Michael Mousad

## **Edwards Lifesciences – Valve Expansion Test Method Improvement**

Table 23 – Juliana Manosalva Torres, Aidan Gerard, Abel Jordan Jul, Gage Banzon, Christina Snape, Katherine Lobos

## **Edwards Lifesciences – Heart Valve Testing**

Table 27 – Alexander Martin Duesund, Bon Cheung, Thomas Moy, Steven Huynh, Arnold Cudia, Jaime Ibarria

## **Edward Lifesciences – Multi-zone Heat Sealer**

Table 40 – Mike Luna, Jerry Tu, Don Nguyen, Julius Fedelino, Saud Khan, Milton Zenteno

## **Disney – Space Mountain**

Table 45 – David Cobos, Joe Hernandez, Joshua Bonilla, Tin Tran, Jaqueline Martinez, Luis Ruvalcaba

## **Disney – Wheelchair Tie Down**

Table 50 – Ian Fabre, Edgar Ruelas, Ivan Lara, Rogelio Navarrete, Timothy Kang

## **Taskloop**

Table 57 – Dylan Geraci, Brianna Zaffina, Beatriz Torres Archundia

## **Robotdog House Inspector: Damage Control**

Table 67 – Daniel Palomera, Mason Jennings, Tommy Nguyen, Osvaldo Torres Guerrero

## **Month2Month Robot Dog Navigation Project**

Table 68 – Martin Nguyen, Brendon Cozzens, Kshitij Pingle, Farren Tanudjaja

# **Legacy Projects**

## **Project Aurora – Titan Rocket**

Table 1 – Jonathan Prijyanonda, Jessica Nolan, James Swenson, Marco Santana, Isaac Vega, Sebastian Silva, Zachary Tucker, Eric Strathman, Sean Goossens

## **Titan Racing Baja SAE**

Table 2 – Bryce S Flores, Cole Navarro, Katia Maldonado, Isaac Hernandez, Suhana Natalia, Torris Epps, Nicholas Duong, Angelo Carney, Kevin Zamudio, Manny Solorio, Andrew De La Cruz, David Perez, Natnael Haile, Elizabeth Gonzalez

## **Concrete Canoe**

Table 3 – Adan Aguilera, Ryan Kodama, Gustavo De Leon

## **Titan Racing Formula SAE**

Table 5 – Haddi Almashat, Jared Warren, Andrew Kenton, Luis Cornejo, Hassan Zakari, Eduardo Suarez, Matt Mathew, Mason Ma

## **Titan Rover**

Table 20 – Aidan Russell Penn, Marcus Filip, Austin Ty, Luis Gonzalez, Marcus Dalija, Ryan Khim, Alex Santana, Andrei Reyes, Carlos Parra, Jorge Garifuna Jr., Jordan Tonsay, Miguel Fierro

## **Titan Aero**

Table 42 – Ellis Galleher, Matthew Kwan, Connor Hyman, Tyler Erautt, Andrea Reza, Jesus Matias, Jason Cook, Gavin Smith, Robert Francis, Johnny Aldana, Joaquin Malabanan, Ryan Tsudama, Brandon Peck

## **ASCE Steel Bridge**

Table 63 – Leonardo Gabriel Umana-Valencia, Diego Lara, Brandon Contreas, Fatima De Avila, Aidan Vouga, Kofi Antwi, Selena Lam, Saveen Liyanage, Joseph Cervantes

**Thank you to all our participating students and faculty!**

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