



ECE 189A/B CAPSTONE PROJECT PRESENTATIONS

2018 ENGINEERING DESIGN EXPO

JUNE 8, 2018

ESB Rm 1001 (9a-12p)

Corwin Pavilion Ctyd (2-5p)

**ECE 189 A/B - Instructor: Dr. Yogananda Isukapalli /
TAs: Caio Motta and Celeste Bean**

9:00 - Opening remarks by ECE 189 A/B Instructor Dr. Yogananda Isukapalli

9:05 - TiresiaScope : A headset that assists blind people in identifying nearby obstacles. Team: John Bowman, Trevor Hecht, Timothy Kwong, Devon Porcher, Brian Young

9:30 - Gaucho Hawk (AeroVironment): A printed circuit board with state-of-art sensors and relevant software for high precision drones. Team: Kurt Madland, Yesh Ramesh , Vikram Sastry, Richard Young, Jack Zang

9:55 - SPOT (NASA): Device that helps astronauts path-find on unknown terrain, without an increase in cognitive load. Team: Saurabh Gupta, Bryan Lavin-Parmenter, Neil O'Bryan, Brandon Pon

10:20 - * Deep Vision (SEAL Lab, NVIDIA): Identifies and tracks targets such as dogs and people in real time by analyzing video recorded by the drone's camera. Team: Chenghao Jiang, Terry Xie, Charlie Xu, Jenny Zheng

10:45 - WALL-E (Oakley Lab): A submersible low-light camera that can be deployed in tandem to analyze Ostracod courtship patterns using computer vision techniques. Team: Veena Chandran, Karthik Kribakaran, Wesley Peery, Franklin Tang, Vincent Wang, Karli Yokotake

11:10 - Hover Hand (Arveng Technologies): A glove that recognizes and converts hand movements to pilot a quadcopter drone. Team: Austin Dorotheo, Steven Fields, Colin Garrett, Miclos Lobins, Zach Meyer

11:35 - ** UCSB Hyperloop (Northrop Grumman, Laritech Inc., Montecito Bank & Trust): A communications, telemetry, & control unit for UCSB's entry into SpaceX's Hyperloop Pod Competition. Team: Cameron Bijan, David Donaldson, Alex Jun, Dylan Vanmali, Mark Wu

** Team is participating in the 2018 Design Automation Conference (DAC) – System Design Contest*

*** Multidisciplinary Team of Computer Engineering, Mechanical Engineering and Electrical Engineering students*