CS and ECE Capstone Projects Presentations & Poster / Pizza Session

ECE 189 | CS 189 | ECE 188 Eye in the Sky in collaboration with Poww

String Cheese

1) THE PROBLEM

(1) Unfixe

(1) Untend

3) DATA DISPLAY

The farmer receives

GPS coordinates of possible problems

2) OUR SOLUTION

PowWow can detect WHEN a water leak occurs, but NOT WHERE. To locate leaks we send out a UAV (see bottom left) to take aerial pictures of the farm in both the visible and infrared spectrum.



Morning: ECE 189 in ESB 1001 (9:30-11:00) | CS 189 in ESB 1001 (11:00-12:00) | ECE 188 in the ESB Courtyard (10:00-12:00) Posters & Free Pizza (Noon to 1:00pm): Engineering Science (ESB) Courtyard

Afternoon: (1:00-4:30): CS 189 in ESB 1001

2015 Best Project Award Presentations: ECE 189 & ECE 188 @ 1:00pm | CS 189 @ 4:30pm

ECE 189 A/B (ESB 1001) – Instructor: John Johnson

MORNING SESSION ONLY — 9:30am to 11:00am

- 9:30am Opening Remarks: Dr. John Johnson, Instructor
- 9:45am InfiniTable: an interactive, multifunctional table made up of individual tiles that users can connect in any configuration Team: William Miller, Sarah Pilkington, Charles Crain, Isaac Flores, Brian Phan
- 10:20am Open Sesame: a portable door security accessory that can unlock doors remotely with WiFi via an Android or iOS app Team: Eric Taba, Grant Apodaca, Jeffrey Bolin, Richie Agpaoa, Evin Sellin

POSTERS & PIZZA LUNCH in the ESB Courtyard — 12:00pm to 1:00pm

ECE 188 A/B (ESB Courtyard) – Instructor: Ilan Ben-Yaacov

MORNING SESSION ONLY — 10:00am to Noon

- 10:00am FreshBox: a fresh take on the age old problem of (not so) dirty clothes
- Sponsor: Dr. Aaron Rowe / Team: Henry Huang, Amir Khazaieli, Ernesto Ortiz, Yunwei Zhou
- 10:25am HummingbIRd: Stabilized Gimbal for Drone
- Sponsor: FLIR Systems / Team: Tal Bernard, Vincent Komala, Victor Wu, Patrick Yin
- 10:55am inferno: Wireless Hands-Free Thermal Imager for Fire fighting / Search & Rescue
- Sponsor: FLIR Systems / Team: Jason Farkas, Sullivan Morsa, Sean Tauber 11:20am — SONEST: Speaker Reliability Test System
- Sponsor: Sonos / Team: Tyler Bellenfant, Connor Lamon, Nathan Pike

POSTERS & PIZZA LUNCH in the ESB Courtyard — 12:00pm to 1:00pm

CS 189A/B (ESB 1001) – Instructor: Chandra Krintz (A), Tim Sherwood (B)

- MORNING SESSION 11:00am to Noon
- MapFolio: mobile app that maps indoor spaces
- Sponsor: Appfolio / Team: Kazbek Seilkahanov (lead), Sidney Rhoads, Crystal Cheung, Tom Craig, Michael Qiu
- Moose Blazers: showcase low power, high performance characteristics of using GPGPU acceleration compared to a serial processing CPU in computer vision applications Sponsor: Aerospace / Team: Jordan Pringle (lead), Melissa Anewalt, Scott Walstead, Peter Gaede

POSTERS & PIZZA LUNCH in the ESB Courtyard — 12:00pm to 1:00pm

AFTERNOON SESSION (Part 1) — 1:00pm to 2:50pm

- Struct By Lightning: smart assistant integrated with video conferencing that observes the stream and provides real-time assistance and info Sponsor: Citrix / Team: Trevor Frese (lead), Evan Crook, Britt Christy, Kevin Malta
- The Sixth Sensor: a multi-wavelength camera that allows users to capture image stacks, review images, and store files on a cloud-system Sponsor: FLIR / Team: Jocelyn Ramirez (lead), Jonnathan Terry, Javier Hernandez, Chris Inderwiesche, Yu-Cheol Shin
- Treadsetters: connect a bike to the Internet of Things Sponsor: Qualcomm / Team: Saili Raje (lead), Duncan Sommer, Oliver Townsend, Joel Dick, George Karcher
- NovaToast: a home detection system using a Lepton camera and thermal images Sponsor: Novacoast / Team: William Chen (lead), Brian Wan, Jacob Anderson, Jonathan Simozar, Christopher Kim
- Mercury Squad: gather data, find meaningful correlations and potential causality, and visualize it in readable graphics Sponsor: HG Data / Team: Sean Spearman (lead), Aimee Galang, Cody Brown, Ray Smets, Tim Shen

COFFEE & SNACKS BREAK — 2:50pm to 3:00pm

AFTERNOON SESSION (Part 2) — 3:00pm to 4:30pm

- Team Voice++: personal assistant for mobile devices that listens for voice commands and lets users perform usually difficult tasks during a phone call Sponsor: Invoca / Team: Petros Khachatrian (lead), Chris Atanasian, Julio Garcia, Belsin Barkhosir, Sheng Zheng
- Savvy-gnon: an application that enables farmers to monitor their crops using near-infrared imaging Sponsor: VineRangers / Team: Rick Waltman (lead), Iris Moridis, Ariel Xin, Amy Chen, Chien Wang
- Team Enigma: a mobile application for customers to find and match a range of products Sponsor: Raytheon / Team: Blake Husserl (lead), Rafal Wojciak, Jose Vasquez, Metehan Ozten, Ahmad Bayonis

Thanks to Citrix for the generous support of the pizza lunch at the poster session!

www.ce.ucsb.edu/capstone/capstone-2015/