

Capstone Senior Project Day

CS & ECE 189A/B and ECE 188A/B

June 6 (Thu) • 10am-4:20pm • ESB

Computer
Engineering
UCSB

Morning (10-12:00): ECE 188 – ESB Ctyd (10-11:40) and CS 189 – ESB 1001 & ECE 189 – ESB 2001 (10:30-12)
Posters & Free Pizza / Cake Lunch (noon to 1:00pm): Engineering Science (ESB) Courtyard
Afternoon (1-4:20p) - ECE 189 – ESB 1001 (1-3:00) and CS 189 – ESB 2001 (1-3:00) & ESB 1001 (3:20-4:20)

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

- **10:00 - HearTouch:** Android Hearing Aid for Tactile Communication. *Team:* Mingduo Dun, Matthew Morea, Ron Ocampo
- **10:25 - Rejuvalight:** Pay-As-You-Go Protocol for Lighting System. *Team:* Carl Bycraft, David Scully, Brendan Welch
- **10:55 - Arradian:** Ground Penetrating Radar Using Circular Data Acquisition. *Team:* J. Perez, V. Radzicki, K. Tsung
- **11:20 - Bliss:** ICU Noise Reducing Bluetooth Alarm System. *Team:* B. Lovera, V. Melero, J. Padilla, S. Skenzic

ECE 189 A/B (ESB 1001 & 2001) – Instructor: John Johnson

MORNING SESSION (ESB 2001) - 10:30 Opening Remarks

- **10:40 - Track Mate:** a GPS/MP3 player intended for athletes on the go. It streams music and display the distance traveled and average speed, and other info to assist training. *Team:* Nathan Beste, Arzhang Badiozamani, Justin Flair, Evan Graves
- **11:05 - Smart Cart:** an interactive display attached to shopping carts. it will let you find items, apply coupons, and log a checkout list to decrease inconveniences of shopping. *Team:* Pallavi Jain, Vivian Vasquez, Peter Nguyen, Deniz Kaplan
- **11:30 - Smart Guitar:** a device that picks up analog signals from a guitar and displays the data as music notes designed to allow musicians to efficiently read/write music. *Team:* Alex Paige, Zhiyuan Tang, Jeff Hanna, Larry Zhao

AFTERNOON SESSION (ESB 1001) - 1:00 Opening Remarks

- **1:10 - AFRObot:** an autonomous robot that follows and traces existing lines w/ high precision. Its applications incl. repainting existing sports fields and fading street lines. *Team:* James Tse, Wei Dai, Travis Frecker, Peter Verlangieri
- **1:35 - Swell Alert:** a WiFi-connected alarm clock that uses data from publicly available sources to monitor surf and meteorological current events. *Team:* Eric Goodman, Ryan Summers, Adam Sundberg, Outhone Bounkhoun
- **2:00 - M.A.D.Dog:** an autonomous security robot that maps an office before beginning a patrol. Upon detecting an intruder, it sends a notification to the security desk via WiFi. *Team:* Nicholas Maddy, Timothy Dayley, Kevin Liou
- **2:25 - Mu.S.E.:** an all in one automatic music player that plays tracks based on the surrounding environment including factors such as ambient light, weather, time of day. *Team:* Tim Chin, Omar Gonzalez, Ward Huang

CS 189A/B (ESB 1001 & 2001) – Instructor: C. Krintz (A), T. Sherwood (B)

MORNING SESSION (ESB 1001) - 10:30 to Noon

- **10:30 - Hex Pistols:** build an integrated system of multiple Kinects and Television screens to create a realistic three dimensional panoramic view of an chosen environment. *Team:* Jerry Peng, Sea Pong, Alex Scarlett, Anthony Narsi, Kevin Sheridan
- **11:00 - Prograham Cracker:** Creating a tool to for monitoring power usage and allowing for efficient data analysis. *Team:* Jay Mutarevic, Nick Krause, Kristen Morse, Branton Horsley
- **11:30 - Team BRX:** a web-based system will transform data from real-time feeds, websites, and social networks into geospatial locations, places of interest, and other metadata. *Team:* M. Greenfield, A. Coccia, A. Dodson, P. Huang, K. Bier

AFTERNOON SESSION - Part 1 (ESB 2001) - 1:00 to 3:00

- **1:00 - The Constructors:** an online ticket selling and purchasing system that will be easy and convenient to use by both sellers and purchasers. *Team:* Alex Hamstra, Jared Roesch, Kyle Jorgensen, Ben McCurdy, Brittany Beri
- **1:30 - Undefined_reference_to_teamName:** mobile application for consumption and generation of user made content that is mainly focused around videos. *Team:* Zach Sperske, Leif Dreizler, Andrew Cooney, Andrew Thomas, Scott Bishop
- **2:00 - Foo-Tang Clan:** a tenant-facing mobile application that lets users pay their rent, report maintenance issues, communicate with neighbors. *Team:* Abraham Dela Cruz, Raj Luhar, Chris Horuk, Joey Phommasonone, Zack Warburg
- **2:30 - NIBBLE:** a tool to explore and create documentation for web services and API's in order to display them in a deliverable format. *Team:* Andy Duong, Tong Wu, Mark Oparowski, Jimmy Lee

AFTERNOON SESSION - Part 2 (ESB 1001) - 3:20 to 4:20

- **3:20 - Team Epsilon:** explore apps for computer vision and augmented reality on Android-powered mobile devices that combines augmented reality with social media. *Team:* M. Hinson, J. Faghih-Nassiri, L. Buckland, A. Chou, JC Huang
- **3:50 - Null Terminators:** collection of performance stats from hosts, creating visualization of time-series, and automating decisions based on time-series analysis. *Team:* Karanbir Toor, Vladimir Adam, Ryan McGinley, Cesar Polanco, Nick Cross