

# Capstone 2012

## Capstone Senior Project Presentation Day Thursday, June 7th, 2012

### Computer Science 189A/B

Engineering Science Building (ESB), Room 1001 — 9:00a-12:00p

- **Team NULL (9:00):** tool to determine if an App found in the App store is malicious.  
*Team:* Yulia Dubinina (lead), Jasper Fredrickson, TJ Koblenz, Victor Moreira
- **AIR Games (9:30):** Augmented Interactive Reality Games - design a suite of games using the Qualcomm Augmented Reality SDK.  
*Team:* Nataly Moreno (lead), Spencer Bolton, Sean Chen, Erik Villegas
- **Kinect2VR (10:00):** combine the 3D capabilities of WorldViz's head mounted display (HMD) with the motion capture technology of the Kinect to create a virtual environment.  
*Team:* Jon Chu (lead), Andre Abrahamian, Matthew Garcia, Alex Hsu
- **We'reTheBest (10:30):** development of a large-scale data comparison widget for users to embed onto their websites.  
*Team:* Dillon Kearns (lead), Roger Chang, Joni Rae Lopez, Cindy Lu, Josh Van Blake
- **Team RDRE (11:00):** speeding up of image processing techniques, specifically image re-targeting by transferring the complex computation done on the CPU to the GPU.  
*Team:* Roger Ngo (lead), Derek Ho, Robert Hsu, Evan Goad
- **KC (11:30):** autonomous system consisting of the Microsoft Kinect mounted on a mobile robotics platform.  
*Team:* Kenneth Bedolla (lead), Andres Barajas, Roy Handelsman, Lane Meier

### Electrical and Computer Engineering 188A/B

Engineering Science Building (ESB), Room 2001 — 9:00a-12:00p

- **VirtualU (9:00-9:30):** 3D modeling using 4 Microsoft Kinect sensors for use in a virtual fitting room  
*Team:* Brandon Gomez, Jon Waltman, Jay Wright
- **ICARUS Spectral Characterization System (9:30-10:00):** robust tool for collecting angularly resolved spectral power density measurements of light sources  
*Team:* David Cosenza, Seth Danielson, Alfredo Torres
- **BrightBlu (10:00-10:30):** smartphone controlled Bluetooth home automation complete with the world's first app-store for your home  
*Team:* Sidhant Bhargava, Ben Chang, Taylor Umphreys
- **Android QuickDraw (10:30-11:00):** android-based glucose meter  
*Team:* Laurel Hopkins, Bassel Ihsan, Taishi Kato
- **PHANTIR (11:00-11:30):** near-infrared imaging platform  
*Team:* Jeff Imamaru, Kevin Lee, Di Li
- **flexSD (11:30-12:00):** flexible sigma delta remote signal processing platform  
*Team:* Alec Dibble, Daniel Kouba

### Electrical & Computer Engineering 189A/B

Engineering Science Building (ESB), Room 1001 — 1:15p-4:00p

- **AURCA - Advanced Universal R/C Aircraft (1:15):** model airplane with GPS, gyros, and remote interface that allows a computer and user to fly the plane and see video.  
*Team:* Alexander Adams (leader), Michael McKeown, Ethan Preble, Sebastian Siakowski
- **PIP - The Plug-in Player (1:45):** MP3 player with SD card, LCD display, keyboard, audio decoder to expand files into sound, power supply, and speaker/headphone output.  
*Team:* Luis Rocha (leader), Mike Erez-Kdosa, Edward Gabriel, Kevin Malby
- **RoboLock — Remote Door Lock (2:15):** device mounted to a door that can be remotely unlocked from any internet-connected device, be it a cell phone or a desktop computer.  
*Team:* Brian Dunlay (leader), Matt Brick, William Moy, Bryan Wang
- **AERV - A Smart Telephone Interface (2:45):** programmable autodialer device that can originate a phone call, play a message, hangup and go to the next requested call.  
*Team:* Chance Carpenter (leader), Ron Bendor, Joshua Chamberlain, Rotem Raviv
- **UAC — Unmanned All-Terrain Camera (3:15):** camera in a remote-controlled vehicle. A user can control the car and watch video from a remote location via a wireless interface.  
*Team:* Perry Yang (leader), Changhao Huang, Baker Ngan, Danny Trinh

[2012 Capstone Event Schedule](#) ECE 188, CS 189 and ECE 189

[CE 189 Capstone webpages](#) CE Sr. Capstone Course Overview

[ECE 188 Capstone webpage](#) ECE 188 Course / Projects

#### 2012 Capstone Project Event - Thursday, June 7

- **Morning Session (9:00a-12:00p)**
  - Computer Science: CMPSC 189A/B (ESB 1001)
  - Electrical & Computer Engineering: ECE 188A/B (ESB 2001)
- **Lunch Poster / Pizza Session (noon - 1:00pm)**
- **Afternoon Session (1:15p-4:00p)**
  - Electrical & Computer Engineering: ECE 189A/B (ESB 1001)

#### Poster Session and Pizza Lunch (ESB Courtyard)

Free Pizza! Open to All! ... 12:00 to 1:00pm

CE extends a special thanks for their generous support:

- **Citrix Online** - Capstone Pizza Lunch
- **Qualcomm** - ECE 188A/B and 189A/B posters
- **Novacoast** - CS 189A/B posters

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