

Education

University of California, Santa Cruz

September 2013 – Expected to Graduate in June 2017

Santa Cruz, California

Bachelors of Science in Computer Engineering with a focus on Digital Hardware.

GPA: 3.36

Relevant Course Work:

- Digital Signal Processing
- VLSI Digital System Design
- Microprocessor System Design
- Logic Design with Verilog
- Signals and Systems
- Analog Circuits
- Algorithms and Abstract Data Types
- Intro to Circuits
- Computer Architecture
- Logic Design
- Computer Systems and C Programming
- Computer Systems and Assembly Language

Experience

Plantronics RT-2M Replacement Project

August 2016 - Present

- Interdisciplinary senior design project that simulated a professional work environment.
- Replaced the RT-2M tester that Plantronics used to test their audio products.
- Designed a faster and more robust tester using LabVIEW on an NI cRIO microcontroller/FPGA.
- Worked in a team of seven.

Leeps Lab Research Intern at University of California, Santa Cruz

December 2015 – December 2016

leeps.ucsc.edu

- Worked under Professor Kristian Vargas Lopez on a behavioral economics project.
- Designed a facial recognition program to determine and log the emotional state of a subject.
- Used Shimmer Sensors to log heart rate (PPG) and skin conductance (GSR) data.
- Gained knowledge on compilers and libraries in Linux.

Emocar - Sponsor Prize at CalHacks Hackathon

October 2014

- Emocar uses a brain-computer interface that allows a user to control a car with their mind.
- Used machine learning to detect patterns in noisy data. Used this to determine if the raw EEG data matched a command for the car.
- Sent instructions based on the EEG data to control motors on an Arduino car.
- Worked in a team of four.

Jouk Li Jou Kan Foto 2012 Volunteer (Haitian Youth Photography Camp)

September 2012

- Went to Haiti to teach street children photography for the Zanmi Lakay non-profit.
- Responsibility of organizing camera gear and as a result increased the efficiency of the lessons.
- Gained one-on-one teaching experience. Taught Photoshop and how to use certain cameras.
- Improved my communication and public speaking skills.

Skills

Hardware:

Microcontrollers (Arduino, Raspberry-Pi, PSoC)
National Instruments CompactRIO FPGA
Speaker / Amplifier Design
Digital and Analog Circuit Design
Shimmer Sensors

Software:

LabVIEW, PSPICE, PSoC Creator, Xilinx ISE
C/C++, Verilog (Including System), Arduino
OpenCV, Boost, Affdex, Curl, Git
Scripting (UNIX Shell, Python)
HTML/CSS, Java, Matlab