

Ethan Chiou

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education

EDU

University of California, Berkeley

Aug 2013 - Dec 2017

GPA: 3.84 || B.S. Electrical Engineering & Computer Science

experience

EXP

Mindtribe

May 2016 - Jul 2016

Firmware Engineering Intern

- Developed firmware for consumer electronics devices.
- Conducted custom battery rundown tests to evaluate battery IC.
- Built prototype Internet of Things device for recording water usage from faucet.
- Weekly meetings with client to discuss priorities and schedule, receive feedback.
- Used C with Cypress PSoC 4, ESP8266, validate integrated circuits with I2C.

Hybrid Ecologies Lab

May 2015 - Present

Research Assistant for Prof. Eric Paulos

CapsLoc: Explored novel hardware input devices with capacitive sensing using an Arduino.

- Employed rapid prototyping techniques to build input devices like sliders and knobs.
- Conducted stepped test to determine error at various potentiometer positions.

Planar Multimaterial Research: Prototyped geometries & mechanisms of fabric-based soft-robotics.

MyPart: Conducted user studies, field tests for low cost air particle counter, assisted in publishing paper.

bebop

May 2014 - Jul 2014

Software Development Intern

- Used AngularJS and Express to develop enterprise applications for bebop.
- Implemented improvements based on feedback from interviews & tests with target users.

projects

PRJ

Smart Lockbox: metakey

Oct 2015

- Smart lockbox for easy access to keys for homeowners and their guests or friends.
- Program Raspberry Pi to read from MeteorJS server, control servo to release key.

Context-Aware Scarf: Spark

Jan 2016 - May 2016

- Design & prototype context-aware scarf to raise conversation about sexual harassment.
- Use Adafruit Feather with GPS to record events, activate when near logged locations.

Liquor Tracking Scale: Topsy

Aug 2015 - Dec 2015

- Conceptualize & develop connected scale for liquor inventory control in 3 person group.
- Work on making Pi interface with electronics & push data to server, design enclosure.

skills

SKL

- Software: **Python, Java, C, C++**
- Microcontrollers: **Arduino, Raspberry Pi**, Cypress PSoC 4, ESP8266
- Design: **Adobe CS, Prototyping**, Wireframing
- Technical Interests: Embedded Systems, Sensors, Rapid Prototyping.