# JEFFREY HUANG

## **EDUCATION**

## University of Illinois at Urbana Champaign

Bachelors of Science Computer Engineering 2017

Taken: CS 225 Data Structures (A+), ECE 391 Computer Systems (A)

GPA: 3.13

## **EMPLOYMENT**

VMware, MTS - Intern, Palo Alto, CA

Jun 2015

## Quicket Solutions, Part time Software Engineer, Champaign, IL

Feb 2015 - May 2015

- Developed a front end search feature in javascript
- Developed a custom revision control system in javascript and python (client/server)
- Numerous changes to the code base, generalized and rewrote multiple sections to scale

## University of Illinois at Urbana Champaign, Undergraduate Lab Assistant, Champaign IL

Jan 2015 - May 2015

- Lab Assistant and Grader for ECE 220, an introduction to programming and computer systems class

## **PROJECTS**

#### Seg\_Fault OS

- Developed a barebones Linux inspired OS over the span of a month in a team of 4, written in C and x86
- Included paging, read only file system parsing, signals, executed user code in ring 3, RTC / Keyboard / PIT drivers, scheduler implemented using round robin, 15 system calls, and multiple virtual shells.
- Went further and implemented extra credit features including sound blaster 16 / DMA / mouse drivers, signals, terminal colors, RTC virtualization, terminal history, advanced VGA features (mode 13h), malloc, non-persistent writable file system, and ran our OS on real hardware (old ASUS EEE PC)
- Won 2nd place in the ECE 391 OS Design Competition

#### **Image Based Navigation System**

- Research Project trying to see if it was possible to use a camera and image matching algorithms to guide a UAV when gps and other sensors fail
- Developed the method and wrote the code for storing large images in physical storage using a QuadTree structure by splitting the images into smaller 100x100 images and restoring sections of the image as needed.
- Won best poster in the PURE program

## SafeWalks (iOS)

- Developed a mobile application in a team of two for the police department at UIUC
- Intended as a front end for the school's SafeWalks program and allowed students to easily send a request to the police department

#### **AWARDS**

## OS Design Competition ~ 2nd Place, Sponsored by Microsoft

May 2015

- Won second place among  $\sim\!40$  other operating systems in ECE 391, see Seg Fault OS under projects

#### Best Research Poster, PURE

Apr 2015

- Awarded best poster for the Image Based Navigation System project among a group of ~25 undergraduate teams, see Image Based Navigation System under projects

## Memory Lane ~ VandyHacks 2015 Sponsor Prize, Digital Reasoning

Mar 2015

- Memory lane is an application that was developed at a hackathon at Vanderbilt that is intended to help you learn a language in a new way that is fun and effortless.

#### **ACTIVITIES**

ECE Pulse, Webmaster

May 2015 - Current

## **SKILLS**

**PROGRAMMING:** C, C++, x86, JavaScript, ObjC, Ruby, Python

FRAMEWORKS AND TOOLS: GDB, Vim, Rails, Web2Py, Cocoa Touch and iOS SDK, LLDB