

# Kai-Sern Lim

📍 San Jose, CA | ✉️ kaisern.lim@berkeley.edu | 📞 1.408.666.3560 | 💻 kaisernlim.com | 🌐 LevelTwo

## EDUCATION

### UNIVERSITY OF CALIFORNIA, BERKELEY

BS IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE

Expected May 2017 | Berkeley, CA

Sophomore GPA: 3.04 | Junior GPA: 3.43



My Website

## RELEVANT COURSEWORK

### CURRENT

Information Theory & Coding • Database Systems • Computer Simulations in Earth & Planetary Science

### COMPLETED

Data Structures, Efficient Algorithms & Intractable Problems • Machine Learning • Computer Security • Embedded Systems • Probability & Random Processes • Computational Photography & Image Processing • Digital Signal Processing

## PROJECTS

### PANORAMA ALIGN

Aligns images for a panorama utilizing Harris Corner Detection, MOPS, and RANSAC algorithms, written in Python

### NEURAL NETWORK

Written from scratch, a neural network code with one hidden layer in Python, achieving 99% test accuracy on the MNIST dataset

### EULERIAN VIDEO MAGNIFICATION

Python program that implements the MIT paper processing a video by amplifying selected band-pass filtered frequency motions

### MAPREDUCE 15 PUZZLE

Finds all possible board states of a sliding puzzle and strongly solves them using Apache Spark (MapReduce)

## EXPERIENCE

### SPLUNK | FRONT END ENGINEERING INTERN

May 2016 - August 2016 | San Francisco, CA

- Redesigned Splunk's **URL generation** system, inventing a new, **backwards-compatible** system with an  $\approx 63\%$  reduction in function arguments, and implemented the design concept with a focus on stable **test-driven development** and **ES6**.
- **Customized** a version of Splunk that was used at a sales demo showcasing how **OEM** partners can customize Splunk.
- Worked with **BackboneJS** and **PostCSS** technologies to **refactor** the **production code** for several of Splunk's pages.

### ADAPTIVE INSIGHTS | SOFTWARE ENGINEERING INTERN

June 2015 - August 2015 | Palo Alto, CA

- Worked on the **Build & Release Team**, and set up **Continuous Integration** system with **Jenkins**.
- Wrote **Python scripts** for automation of information retrieval from active machines.
- Wrote custom detector plugin for **FindBugs** - the Java static analysis tool - to lint static code for errors.

### EE16B (DESIGNING INFORMATION SYSTEMS II) | ACADEMIC INTERN

January 2016 - May 2016 | Berkeley, CA

- Responsibilities include: grading students' assignments, guiding students in lab, and staffing homework parties

## SKILLS

### PROGRAMMING

Over 5000 lines: Python • Javascript

Familiar: ReactJS • Java • C • Ruby • Apache Spark • MIPS

### NON-PROGRAMMING

Skilled in: HTML • CSS • Adobe Photoshop • Adobe Illustrator • Sketch • Jenkins • Docker •  $\LaTeX$

HAM Radio Licensed (Technician)