

Andrew Chan

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

B.A. Computer Science and Applied Mathematics
Expected May 2019
Overall GPA: 3.6
Major GPA: 3.7

LINKS

Github: [theandrewchan](#)
LinkedIn: [andrew-k-chan](#)

COURSEWORK

COMPUTER SCIENCE

SICP
Data Structures & Algorithms
Discrete Math & Probability Theory
(**Current Course Staff**)
Computer Architecture
Efficient Algorithms & Intractable Problems
C++ for Programmers
Information Devices & Systems

OTHER

Linear Algebra & Differential Equations
Linear Algebra (Theory)
Probability & Random Processes
Mathematical Physics
Thermodynamics & Electromagnetism
(**Honors Course**)
Multivariate Calculus

SKILLS

PROGRAMMING LANGUAGES

Java • JavaScript • Python • C • C++ •
CSS • PHP • Assembly • SQL • \LaTeX

FRAMEWORKS AND LIBRARIES

React.js/Redux • Django • Node.js
(Express.js) • OpenCV

EXPERIENCE

WEBROOT | Software Engineering Intern | Threat Intelligence

June 2017 – Aug 2017 | San Diego, CA

- Infrastructure automation and load testing for threat intelligence information retrieval system.
- Constructed new, highly scalable authentication scheme for customer-facing threat intelligence API. The (stateless) scheme improves response times by an order of magnitude at higher (>10k) concurrencies.

HERE | Software Engineering Intern | Highly Automated Driving Research

May 2016 – Aug 2016 | Berkeley, CA

HERE provides mapping services to companies including Intel, DJI, and Facebook. The HAD research group is a joint effort with BMW.

- Constructed visualization pipeline of millions of data points for Global Change Detection, aiding in the development of algorithms that use GPS data to detect meaningful map changes on a global scale.
- Created Google StreetView clone for my research team to expedite crowdsourced labeling of roadside driving restrictions. Labeled cases are used to train an image classifier that tells the car when it is at a restricted driving area.

CODEBASE AT BERKELEY | Project Manager, Mentored Project

Feb 2017 – Present | Berkeley, CA

- Previously a developer on the team that built the consumer mobile app for Sutro, a smart water monitoring device manufacturer.
- Since May, project manager for the mentored project, which teaches junior members fundamentals of software engineering.

FIRST ROBOTICS COMPETITION | Chief Programmer, Team 1672

Oct 2014 – June 2015

- Constructed robot control program with both autonomous and manual modes to operate a four-wheeled volleyball playing robot.
- Taught junior members entry-level programming with Java, source control with Git, and educated them on a large existing codebase.

PROJECTS

OPEN SOURCE CONTRIBUTIONS | react-chartjs-2 (★ 645 stars)

github.com/jerairrest/react-chartjs-2

Added support for inline (per-chart) plugins as per the latest release of ChartJS. Merged into latest release.

TWEET RUNNER | 3rd Place Winner, Berkeley CSUA Hackathon

github.com/theandrewchan/tweet-runner

Created a web game in which enemies spawn in real time according to the global Twitter feed.

FARMR | HackDavis 2017

github.com/theandrewchan/farmr

Created a React Native app for iOS and Android where farmers can take a picture of their crops to diagnose crop conditions and diseases. Photos are run through an image classifier trained on an open dataset of 50k plant images labeled by condition.

SELECT OTHER PROJECTS

Regular Expression Parser

Full Text Search Engine

SoundCloud Webapp Clone

Nerf Turret

github.com/theandrewchan/regex

github.com/theandrewchan/search-engine-day-1

github.com/theandrewchan/SoundFoundry

github.com/brianlevis/nerf-iron-dome