# **Daniel Ho**

Website: daniel-ho.github.io

**Contact Information** 

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#### **EDUCATION**

**University of California, Berkeley** 

Berkeley, CA Expected graduation date: May 2019

B.S., Electrical Engineering and Computer Science

• Cumulative GPA: 3.93

• Relevant Coursework:

CS61B: Data Structures Math 53: Multivariable Calculus

CS61C: Great Ideas in Computer Architecture CS186: Introduction to Database Systems CS188: Introduction to Artificial Intelligence

CS189: Introduction to Machine Learning

CS70: Discrete Math and Probability Theory EE120: Signals and Systems

CS170: Efficient Algorithms and Intractable

Math 54: Linear Algebra/Differential Equations

**Problems** 

## **PROJECTS**

### **EthTracker/EthWidget** (daniel-ho.github.io/EthTracker)

July 2017 - August 2017

- Created area and scatter plot visualizations of Ethereum price trends as well as major events involving Ethereum using Dimple.js and D3.js libraries
- Dynamically updated web page data and charts in real-time using a combination of socket.io library and HTML requests from CryptoCompare API
- Designed Android widget that tracks Ethereum price data using Volley HTTP library

BearMaps April 2016

- Implemented backend web server for web mapping application based on Google Maps
- Utilized guad tree data structure for map rastering and A\* searching algorithm to find shortest paths

#### **WORK EXPERIENCE**

RISE Lab Berkeley, CA

Machine Learning Researcher

June 2017 - Present

- Explored the possibility of using encrypted data to train standard neural net structures for applications ranging from medical research to home security devices
- Conducted benchmark tests on convolutional neural networks (CIFAR 10/100 datasets) and sequence to sequence models using alternative activation functions
- Designed set of linear approximations of softmax function, more suitable for efficient encryption
- Authored paper accepted to Al Systems Workshop @ SOSP 2017

Jakin Technology Ltd. Fotan, Hong Kong

Intern

June 21, 2016 – August 5, 2016

- Researched functions and capabilities of HID iClass SE smartcard reader module for incorporation in future models of company products
- Developed basic device driver interface to interact with smartcard reader module using C programming language and Linux operating system

#### **EXTRACURRICULAR ACTIVITIES**

#### University of California, Berkeley

Berkeley, CA

EE16B Lab Assistant/Academic Intern

January 2016 – Present

- Educated students about various applications of electrical engineering concepts
- Redeveloped previous semesters' lab material including Arduino code and iPython Notebooks after following introduction of new control scheme in Robot Car Project

#### **Eta Kappa Nu (National EECS Honor Society)**

Berkeley, CA

**Tutoring Committee Member** 

September 2016 - Present

## **SKILLS**

Languages: Python, Java, HTML/CSS, JavaScript, PostgreSQL, LaTeX, C Libraries/Frameworks: D3.js, Dimple.js, TensorFlow, NumPy, Matplotlib, pandas