

EDUCATION

University of California, Berkeley

2016 – 2019

B.S. in Electrical Engineering and Computer Science

3.74 GPA

Eta Kappa Nu (HKN) – IEEE Electrical and Computer Engineering Honor Society

Relevant Subjects: Machine Learning, Probability Theory, Random Processes, Algorithms, Data Structures, Linear Algebra, Discrete Math, Real Analysis, Calculus, Signals and Systems, Circuit Design, Statistics, Physics, Numerical Analysis, Control Systems

SKILLS

Proficient: Java, Python, C#, Jupyter, NumPy/SciPy, PyTorch, Pandas, JavaScript, Android, Swift, iOS, Git, Amazon Web Services

Familiar: C++, TensorFlow, OpenCV, Caffe, MATLAB, MySQL, PostgreSQL, MongoDB, React, Perl, AngularJS, UNIX

EXPERIENCE

Software Engineer | Microsoft

Sept 2019 – Present

- Leveraged terabytes of worldwide geo-entity data to improve query processing systems using deep learning models
- Automated judging for maps relevance metric to speed up data release cycle turnaround time by 800%
- Trained and deployed Transformer models to expand full Microsoft Maps experience to 100+ new global regions
- Coached and mentored an intern who is on track to receive full-time return offer

Undergraduate Student Instructor | UC Berkeley

Jan 2018 – May 2019

- Created Jupyter notebook course content and assignments for STAT 89A (Linear Algebra for Data Science)
- Teaching assistant for EE 120 (Signals and Systems)

Software Engineering Intern | Microsoft

May – Aug 2018

- Implemented algorithm to resolve 25% of spelling-correction errors for Bing location queries
- Identified patterns in big data through rapid experimentation to gain insights into potential improvements

Software Engineering Intern | Intuit Inc.

May – Aug 2017

- Contributed to dependency migration from Bower to npm/yarn resulting in 25% faster build times
- Designed and implemented responsive navigation components for QuickBooks Online in React JS

Software Engineering Intern | Aupera Technologies Inc.

Jul – Aug 2016

- Developed vehicle detection algorithm for videos using Haar cascade classifier and CNN in OpenCV and Caffe
- Created automated computer vision assisted data extraction tool resulting in 10x faster data acquisition time

RESEARCH

Undergraduate Researcher | Berkeley AI Research (Advisor: Dan Klein)

Sept 2018 – Dec 2018

- Optimized the architecture of constituency parsers by using self-attentive encoders with BERT
- Trained and validated transformer models using PyTorch using factored attention mechanism

PROJECTS

Crowdbotics

2017

- Slack chatbot that uses natural language processing to conduct automated technical interviews
- Trained k-nearest-neighbors classifier and used word2vec to understand user message intent

AI for Snake Game

2016

- Devised reinforcement learning algorithm inspired by Kenneth Stanley's paper on "NeuroEvolution of Augmenting Topologies"

Smartphone Camera Ruler | (Winner @ Fishackathon Vancouver)

2016

- First Android app able to measure length of objects using a single photo – no physical backdrop or multiple angles needed!
- Developed innovative algorithm to quickly and accurately calculate object length using camera focal distance metadata