

## EDUCATION

### Stanford University

September 2018 — June 2019 (expected), **GPA: 3.7**  
**M.S. Computer Science (Artificial Intelligence)**

### Stanford University

September 2015 — June 2019 (expected), GPA: 3.7  
B.S. Computer Science (Information), minor Education

## RELEVANT COURSEWORK

<b>AI Background</b>	Machine Learning, Artificial Intelligence	CS 229, CS 221	Aut 2016, Aut 2017
<b>Deep Learning</b>	Deep Learning, Generative Models	CS 230, CS 236	Aut 2017, Aut 2018
	Natural Language Processing, Visual Recognition	CS 224N, CS 231N	Win 2019, Spr 2019
<b>Education and Teaching</b>	Intro CS TA, Intro Education	CS 198, ED 101	Present, Aut 2016
<b>Core CS Background</b>	Operating Systems, Algorithms	CS 140, CS 161	Spr 2018, Win 2017

## INDUSTRY EXPERIENCE

### Robinhood

Data Engineering Intern (Data Team — Menlo Park, CA)

Sum 2018

**Spark, Kafka, AWS**

- Supplied 100M+ rows of key user metrics with serverless ETL jobs, removing cross-server joins and speeding up data inquiries
- Modernized Robinhood's AWS Glue "data lake" infrastructure, built logging pipeline for stock news stream processing

### MongoDB

Software Engineering Intern (Education Team — New York, NY)

Sum 2017

**ReactJS, UX, Python, NodeJS**

- Worked with CS educators, CS4All, CSNYC, and NYC Dept of Education to create meaningful computer science units
- Built [mean-median-mode.herokuapp.com](http://mean-median-mode.herokuapp.com), [telegraph-unit.herokuapp.com](http://telegraph-unit.herokuapp.com), [polynomial.herokuapp.com](http://polynomial.herokuapp.com) ([read here](#))

### Gigster

Software Engineering Intern (Automation Team — San Francisco, CA)

Sum 2016

**ReactJS, NodeJS, MongoDB, Slack**

- Fixed team sourcing process to generate network developer teams automatically, sped up sourcing times by over 50%
- Maintained internal LinkedIn and metrics dashboard for the Gigster network, indexing and filtering with Elasticsearch

## RESEARCH EXPERIENCE

### Chris Piech Lab

Research Lead

Aut 2018 — Present

**Object Detection, Speech Recognition, NLP**

- Year-long research analyzing 100K videos to reduce costs of teacher evaluation using deep learning
- Currently applying object detection and language models to the problem, using ideas from YOLO, Mask R-CNN, and others
- In partnership with Stanford Graduate School of Education, Colombian government, aiming to publish results

### Stanford Machine Learning Group (Professor Andrew Ng)

Win — Spr 2018

Student Researcher

**NLP, Transformer, Tensorflow**

- Helped develop [crio.stanford.edu](http://crio.stanford.edu), a grammatical error correction project using neural machine translation
- Developed domain adaptation methods and set up a user data pipeline to personalize model results
- Worked with open source Transformer model ([Attention Is All You Need](#)) and adapted it for deployment

### Stanford Center for Education Policy Analysis

Student Researcher

Aut 2017

**Deep Learning, TensorFlow, Education**

- Training recurrent neural networks as an early warning indicator to predict dropout and performance in high school students
- As part of Deep Learning (CS 230), consulted SF Unified School District on future directions with machine learning

### Deep Learning Coursework Projects

Aut 2016 — Win 2018

Research Project Member

**CNN, RNN, TensorFlow**

- CS 221 (AI) — Ran different RNN models to generate unique music from MIDI files around the internet
- CS 229 (ML) — Used Faster R-CNN to automate labeling bounding boxes and SVM to predict stages of knee osteoarthritis
- CS 234 (RL) — Framed optical flow prediction as a deep Q-learning problem, taking actions in direction of flow

## TEACHING EXPERIENCE

### CS198 Section Leading Program

Senior Section Leader (TA)

Fall 2016 — Present

**Java, C++**

- For six quarters, taught introductory CS curriculum (CS 106A/B/X), held office hours, and graded homework and exams
- Offered a [lesson on educational teaching theory](#) to other section leaders, which is now added to the CS 198 TA training

## OTHER WORK AND FUN

<b>Stanford Sanskriti</b>	Stanford's South Asian cultural organization	President	Present
<b>Stanford Raagapella</b>	South Asian a cappella group, built <a href="http://raagapella.com">raagapella.com</a> from scratch	Musician	Present
<b>Inria</b>	Built a bus visualization system in Santiago, Chile ( <a href="#">read here</a> )	Developer	Spr 2017
<b>Sequoia High School</b>	Shadowed a repeat Algebra 1 teacher	Teaching Intern	Win 2017
<b>Warriors Fan</b>	<a href="#">Golden State Warriors Chrome theme</a> — peak at 70K+ users	Developer	Sum 2016
<b>NAPAB</b>	Redesigned anti-bullying site NAPAB ( <a href="#">before</a> — now @ <a href="http://napab.org">napab.org</a> )	Developer	Spr 2016