

## EDUCATION

### UNIVERSITY OF CALIFORNIA, BERKELEY

2017 - 2019

Intended B.A. in Applied Mathematics, Computer Science

- > CS170 / Efficient Algorithms & Intractable Problems\*
- > CS188 / Artificial Intelligence\*
- > CS61C / Machine Structures\*
- > CS61B / Data Structures
- > CS61A / Structure & Interpretation of Computer Programs
- > Math 110 / Linear Algebra
- > CS70 / Discrete Mathematics & Probability Theory

\* Spring 2018

### DE ANZA COLLEGE

2015 - 2017

Mathematics & Computer Science

GPA: 3.79/4.0

- > CIS 22C / Data Abstraction & Structures
- > MATH 1D / Multivariable Calculus
- > MATH 2A / Differential Equations
- > MATH 2B / Linear Algebra
- > MATH 10 / Elementary Statistics

## PROJECTS

### DEEPFRANK

Fall 2017 - Present

- > Independently study machine learning and natural language processing with Python and TensorFlow.
- > Create an algorithm that learns how to generate new lyrics based on the music artist Frank Ocean using a Sequence-to-Sequence LSTM neural network.

### DATABASES

Fall 2017

- > Independently designed a scaled-down version of a relational database management system.
- > Constructed a restricted dialect of SQL in Java in order to communicate with the database consisting of a sample of UC Berkeley student data.
- > Organized student data using HashMaps and ArrayLists

### AUDIOCRAWLER

Spring 2017

- > Investigated deep learning and music genres during LAHacks 2017 with a group of four. Used Python, TensorFlow, and Librosa.
- > Processed a music database of 10,000 songs, then used audio spectrograms in order to classify music genres.
- > Predicted music genres based on user input with a LSTM neural network.

### VACATIONPLANNER

Winter 2017

- > Worked on a team project that demonstrated knowledge of data structures and abstraction. Coded in C++.
- > Implemented user and file I/O, overall design, as well as data structures, such as hash tables, binary search trees, and stacks.

## SKILLS

- > LANGUAGES: C++, Java, Python, HTML, CSS,  $\text{\LaTeX}$
- > TOOLS: Git, TensorFlow, Keras