

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

May 2017 - Fall 2019

Computer Science, B.A.

- > CS 194 / Computational Photography*
- > CS 161 / Computer Security*
- > CS 170 / Algorithms*
- > CS 100 / Data Science
- > CS 61C / Computer Architecture
- > CS 61B / Data Structures
- > Math 110 / Linear Algebra
- > CS 70 / Discrete Mathematics & Probability Theory

* Fall 2018

EXPERIENCE

FOX NETWORKS

Summer 2018

Software Engineering Intern

- > Deployed a cloud-based analysis tool to perform 24/7 live stream monitoring across 200+ TV stations. **[Node.js, SQL, AWS]**
- > Prototyped an image detection feature for HLS live streams using GStreamer, AWS Rekognition, and DeepLens. **[C, Python, AWS]**

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Spring 2018

Academic Intern

- > Assisted approximately 1400 students with CS61B, the premier data structures course at UC Berkeley.
- > Provided feedback and solving technical problems regarding class material.
- > Mentored students in office hours and labs regarding concepts, homework, classwork, and projects.
- > Wrote guides to assignments and projects for easier student comprehension.

PROJECTS

SYNTHONY

Fall 2018

- > Create a music visualizer based on a user-generated song input. **[Three.js]**
- > Implement simplex noise for vertex and fragment shaders. **[C++, GLSL]**
- > Design specific image filters that react to audio through post-processing.

GITLET

Fall 2017

- > Constructed a variation of git from scratch. **[Java]**
- > Designed a wide variety of git commands, not limited to: pull, push, checkout, fetch, commit. Also expanded these commands for compatibility with remote repositories.
- > Serialized and deserialized commits and blobs as an efficient data structure for file storage.
- > Implemented SHA-1 hashing in order to identify unique commits and blobs.

AUDIOCRAWLER

Spring 2017

- > Investigated deep learning and music genres during LAHacks 2017 with a group of four. **[Python, Keras, 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 long short-term memory (LSTM) neural network.

SKILLS

- > LANGUAGES: Java, C, Python, JavaScript, HTML, CSS, Go, SQL
- > TECHNOLOGIES: Node.js, React, Spark, Pandas, Scikit-learn, Keras