Expected: Fall 2019



### **EDUCATION**

#### UNIVERSITY OF CALIFORNIA, BERKELEY

Computer Science, B.A.

- > CS 186 / Databases\*
- > CS 184 / Computer Graphics\*
- > CS 161 / Computer Security\*
- > CS 194 / Computer Vision
- > 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

### **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]**

# **PROJECTS**

COLORIZER Spring 2019

- > Architect a data visualization platform that classifies an entire artist's discography into specific colors based on user input. [Node.js, React]
- > Create an audio visualizer based on certain audio features derived from Spotify's Web API. [Three.js, Node.js]
- > Implement simplex noise for vertex and fragment shaders. [C++, GLSL]

IMAGE WARPING Fall 2018

- > Constructed both manual and automatic methods to stitch a mosaic from a series of images with corresponding points. [Python, OpenCV]
- > Implemented an algorithm to automatically detect common features in images with the Harris Interest Point Detector, Adaptive Non-Maximal Suppression, rotational invariant features, and RANSAC.
- > Designed a morphing algorithm that warps Delaunay triangulations and cross-dissolves colors from a series of images to seamlessly morph one object into another.

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, C++, Python, JavaScript, HTML, CSS, Go, SQL
- > TECHNOLOGIES: Node.is, React, Spark, Pandas, AWS, Keras

<sup>\*</sup> Spring 2019