Alan Nguyen

EDUCATION

University of California, Berkeley

Computer Science, B.A.

- > Relevant Coursework: Operating Systems, Databases, Computer Graphics, Computer Security, Computer Vision, Algorithms, Data Science, Computer Architecture, Data Structures, Linear Algebra
- > Programming Languages: Python, C/C++, Golang, Java, JavaScript (React, Node.js), HTML/CSS, SQL, Scala
- > Tools/Technologies: Docker, Git, LaTeX, Redux, AWS, Figma, PostgreSQL

WORK EXPERIENCE

Akamai | Fort Lauderdale, Florida

Software Engineering Intern

May - August 2019

Expected: Fall 2019

- > Created a browser application for security specialists to optimize workflow for DDoS mitigation. [React, Redux, Electron]
- > Architected a database with CRUD endpoints to further organize both customer and internal data. [Scala, MySQL]
- > Designed a RESTful search API for Akamai tools used to assess customer data. [Node.js, React, Redux]
- > Implemented a real-time monitoring system for more efficient communication amongst security specialists. [Node.js]

Fox Networks | Los Angeles, CA

June - August 2018

Software Engineering Intern

- > Deployed a cloud-based analysis tool to perform 24/7 real-time monitoring across 200+ TV stations, networks, and live streams. [Node.js, AWS]
- > Constructed a data pipeline in order to visualize data analytics and improve consistency. [Node.js, Splunk]
- > Prototyped an image detection feature for MPEG-DASH and HLS live streams using GStreamer, AWS Rekognition, and DeepLens. [C, Python, AWS]

PROJECTS

> Pathfinder [C++] — stylate.github.io/pathtracer

Physically-based renderer that generates images based on 3D COLLADA models and a pathtracing algorithm.

> Image Warper [Python, OpenCV] — stylate.github.io/image-warping

Application that uses a series of images to computationally construct mosaics, as well as create a morphing sequence from one image to another.

> Visualizer [React, Three.js, GLSL] — tiny.cc/hex-audio

Web application that generates a 3D interactive model based on audio data queried from SoundCloud API and custom shaders in GLSL.

> AudioCrawler [Python, Keras] — github.com/stylate/AudioCrawler

LSTM classifier that reliably identifies music genres based on audio spectrograms.