

Alan Nguyen

EDUCATION

University of California, Berkeley

Expected: Fall 2019

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, Scala
- > **Tools/Technologies:** Docker, Git, LaTeX, Redux, AWS, Figma, PostgreSQL

WORK EXPERIENCE

Akamai | Fort Lauderdale, Florida

May - August 2019

Software Engineering Intern

- > 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, PostgreSQL]**
- > Designed a RESTful search API for Akamai tools used to assess customer data. **[Node.js, React, Redux]**
- > Implemented a real-time monitoring system with sockets 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++] — alandn.io/pathtracer

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

> Mosaic Builder [Python, OpenCV] — alandn.io/mosaic-builder

Application that uses a series of images to computationally construct mosaics using the Multi-Scale Oriented Patches (MOPS) algorithm.

> Visualizer [React, Three.js, GLSL] — alandn.io/hex

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

> ClothSim [C++, GLSL] — alandn.io/clothsim

Real-time simulation of cloth using a mass and spring based system.