

# Alan Nguyen

## EDUCATION

### University of California, Berkeley

06/17 - 12/19

*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, TypeScript, HTML, CSS
- > **Tools/Technologies:** Docker, Git, React.js, Redux, Node.js, SQL
- > **Relevant Knowledge:** Web Applications, UI/UX, Full Stack, Backend

## WORK EXPERIENCE

### Akamai | Fort Lauderdale, FL

05/19 - 08/19

*Software Engineer Intern*

- > Developed a desktop application for 200+ security specialists worldwide to optimize workflow for handling security threats. **[React, Redux, Electron]**
- > Engineered core backend features used to assess customer data. **[Node.js]**
- > Built and documented RESTful API endpoints and database schemas for the security and management portals. **[Scala, Postgres]**

### Fox Networks | Los Angeles, CA

06/18 - 08/18

*Software Engineer Intern*

- > Deployed a scalable, cloud-based analysis tool to perform 24/7 real-time monitoring across 200+ TV stations and live streams. **[Node.js, AWS]**
- > Performed integration and unit testing with a CI/CD pipeline to ensure code quality/coverage and efficient deployment. **[Node.js, Jenkins]**
- > 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. **[C, Python, AWS]**

## PROJECTS

### > Spectra [React, GraphQL, Postgres, Node.js, AWS] — [alandn.io/spectra](https://alandn.io/spectra)

Social networking service for users to discover new music and share opinions.

### > Pathfinder [C++] — [alandn.io/pathtracer](https://alandn.io/pathtracer)

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

### > ClothSim [C++, GLSL] — [alandn.io/clothsim](https://alandn.io/clothsim)

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

### > Visualizer [React, Three.js, GLSL] — [alandn.io/hex](https://alandn.io/hex)

Web application that generates a 3D interactive model based on audio data queried from SoundCloud API.

### > Mosaic Builder [Python, OpenCV] — [alandn.io/mosaic-builder](https://alandn.io/mosaic-builder)

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