alandn@berkeley.edu
(408) 717-2010
alandn.io

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, JavaScript, HTML/CSS
> **Tools/Technologies:** Docker, Git, React.js, Redux, Node.js, SQL
> **Relevant Knowledge:** Web Applications, UI/UX, API Design, Machine Learning

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 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 — alandn.io/spectra
- Scalable web application that stores user info and generated art styles. **[React, Redux, GraphQL, Django]**
- Implementation of the neural style transfer algorithm with convolutional neural networks (CNNs). **[Python, PyTorch]**

> Pathfinder [C++] — alandn.io/pathtracer
Physically-based renderer that generates images based on 3D COLLADA models and a pathtracing algorithm.

> ClothSim [C++, GLSL] — alandn.io/clothsim
Real-time simulation of cloth using a mass and spring based system.

> Visualizer [React, Three.js, GLSL] — 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
Application that uses a series of images to computationally construct mosaics using the Multi-Scale Oriented Patches (MOPS) algorithm.