

ALAN NOUN

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🔗 <https://github.com/alannoun>

EDUCATION

Bachelor of Science in Computer Science

May 2020

Cal State University East Bay

Lawrence Livermore Lab Foundation Scholar

June 2019 - June 2020

First recipient of the Livermore Lab Foundation scholarship, awarded to provide an opportunity to work with and as a software developer at Lawrence Livermore National Laboratory under the mentorship of senior software developers.

SKILLS

Computer Languages

Python, Bash, Javascript, Typescript, GraphQL, HTML5, CSS, C++

Software & Tools

Docker, Git, Linux, NodeJS, React, Redux, SQL/NoSQL, TypeORM

EXPERIENCE

Lawrence Livermore National Labs

June 2019 - June 2020

Data Science Summer Institute Intern

- Worked as the sole developer on the containerization of a legacy high-performance 3D application using Docker to improve portability and bring the project closer to being production-ready
- Developed multiple Bash/Shell scripts, streamlining and automating the process of generating synthetic data, to train a convolutional neural network for the classification of airplanes in satellite imagery
- Debugged complex C++ build systems and solved multiple device driver issues to enable performing graphical operations in a virtual environment. The Docker image I created is now being used as the basis for production
- **Project Stack: Docker, Linux/CentOS7, Python, C++, Java, Bash, 3D Graphics SDK OpenSceneGraph, CMake, GDAL**

EXTRA-CURRICULAR AND PERSONAL PROJECTS

Job Social Media

<https://jobhive.io/>

- Social media app created to keep track of job applications, organize company specific application resources, and share personal experience interviewing at different organizations.
- Utilized a React GraphQL client library to implement cache normalization, pagination, design custom cache resolvers, and query GraphQL API running on NodeJS
- Designed event driven API endpoints for live feed updating by subscribing via Apollo Server's subscription handler, developed custom authentication middleware, and implemented data batching with GraphQL DataLoader
- Generated SSL certificates using LetsEncrypt, deployed front end to Vercel, and pushed the GraphQL API to a docker container running on a Digital Ocean droplet.
- **Project Stack: React, Next.js, Typescript, TypeGraphQL, URQL, NodeJS, Apollo, PostgreSQL, TypeORM, Redis**

Department of Energy Cyberforce Competition

November 2019

- Secured our Nginx web server hosted on a CentOS7 machine by updating outdated libraries, using a firewall to close off unused ports, configuring Nginx to use SSL, implementing perfect forward secrecy, and other best security practices

Scientific Adventures For Girls

January 2019 - May 2019

Teacher's Assistant

- Engaged with students grade 3-5 and taught them about various aspects of science with the intention of developing their interest in STEM at an early age. It's a passion and goal of mine to help develop the next generation of scientists and engineers