

Nathan Lee

Bachelors and Masters in Computer Science - Cal Poly SLO
BS '23 • MS '25

EXPERIENCE

Grass Valley | Software Engineer

October 2024 - Present

Shipped real-time software for Grass Valley switchers used in high-profile broadcast events such as the NFL, Olympics, and Formula 1, reaching global audiences.

- Developed efficient control software for FPGAs on an embedded linux device for a new high-performance video input board.
- Integrated Network Time Protocol (NTP) on a RTOS and automated clock broadcasts to peripheral boards, removing time drift and synchronizing logs across the system

Cylerian | Software Intern

June 2023 - June 2024 ([1 yr](#))

Created XDR agents that publish events to a SIEM dashboard, enhancing threat visibility and accelerating incident response across a fleet of devices.

- Engineered an interactive Active Directory attack-surface map, increasing threat visibility for large corporate clients.
- Created a local DNS filter in a XDR agent to block and report malicious domains accessed on clients' company computers.

Amazon (Last Mile Route Forecasting) | Jr. Software Developer

March 2021 - January 2023 ([1 yr 11 months](#))

Contributed to high impact software that forecasted package volume for every Amazon delivery station in North America and the EU, increasing planning efficiency and saving tens of millions of dollars each year.

- Integrated an artifact management system into an AWS-hosted data lake, enabling other teams to connect their essential services and leverage the data lake's resources.
- Built a Python CLI tool to run ad-hoc queries against the data lake, reducing turnaround on exploratory analyses for internal and sister data science teams.
- Designed and implemented a CDK package to deploy runtime configuration with DynamoDB and Lambda, significantly reducing software complexity. Built and distributed with a CI/CD pipeline.

Listo.io (Billy) | Software Intern

November 2019 - July 2020 ([8 months](#))

Assisted the development of a working beta of a web-based invoice processing platform. Implemented data visualizations in a user facing dashboard.

PROJECTS

PeerProxy - Master's Thesis

Invented a novel approach to using WebRTC as a transport for web traffic. Developed a browser client leveraging modern web APIs and a local proxy written with Go. Conducted extensive network performance testing between EC2 instances. Applications include IoT and self hosting.

cragseason.com

Shows best times of year to rock climb at different areas from a scraped dataset of 11 million ticks rendered into an interactive Mapbox visualization. Includes agentic AI powered semantic search for over 400K+ routes and areas.

tabify.app

Interactive Svelte app that shows the guitar tab of the users currently playing song on Spotify. 100+ monthly sessions. Deployed on Cloudfront with Lambda endpoints and a DynamoDB cache.

<https://nathanlee.info>

(510) 393-7880

nathan.l.lee123@gmail.com

github.com/nathanlee1

linkedin.com/in/nathanllee

SKILLS

Programming Languages:

Typescript / Javascript, Go, C++, Python, Java

Cloud

AWS Certified Cloud Practitioner

AWS: CDK, S3, DynamoDB, Lambda, EC2, ECS, Cloudfront, IAM, Step Functions

Frontend

React, Svelte, HTML, CSS / Tailwind, Figma

Other Tools

Bash, Git, Pandas, SQL, WebRTC, Websockets, CI / CD, Integration Testing

Relevant Coursework

Distributed Computing *

Parallel Computing *

Databases

Programming Languages

Data Science

Deep Learning *

* Graduate Level