

# NEO SUD

+1 (650) 436-2147 | [neo.sud@gmail.com](mailto:neo.sud@gmail.com) | [linkedin.com/in/neosud](https://linkedin.com/in/neosud) | [github.com/aneokin](https://github.com/aneokin)

## EDUCATION

University of California, Santa Cruz

Santa Cruz, CA

Bachelor of Science, Computer Science

Sep 2023 – Jun 2026

- **Cumulative GPA: 3.96/4.0**
- **Relevant Coursework:** *Applied and Theoretical Machine Learning (Graduate), Artificial Intelligence, Computer Architecture, Data Structures and Algorithms, Computer Systems Design (C), Databases.*

## EXPERIENCE

Machine Learning Intern

Jun 2025 – Sep 2025

CrowdStrike

Sunnyvale, CA

- Built and shipped a unified CLI interface for 30+ malware classifiers, streamlining internal model testing.
- Consolidated classifier microservices into a monorepo, cutting cross-team bug tickets by 40%.
- Automated dependency syncing and validation pipelines in Python (UV), improving build reproducibility.
- Designed CI/CD pipelines in Jenkins, accelerating build and runtime performance up to 4x.

Machine Learning Researcher

Sep 2024 – Present

UCSC Genomics Institute

Santa Cruz, CA

- Deployed the Universal Cell Embedding (UCE) Model to process 25+ single-cell tumor datasets.
- Extracted 63M+ UCE embeddings from AWS S3, creating a novel tumor microenvironment cell atlas.
- Implemented cell-type clustering using KNN and Louvain, reaching up to 91% classification accuracy.
- Selected among 27 national research groups for presentation at the NCI ITCR 2025 Symposium.

Machine Learning Research Fellow

Apr 2024 – Sep 2025

Tech4Good Lab

Santa Cruz, CA

- Created Annota, an ML platform used by 200+ users; first-authored a paper submitted to IUI '26.
- Implemented Dawid-Skene EM algorithm for automated grading, improving efficiency by 40%.
- Built a RAG model using 50 expert interview transcripts to enhance career guidance accuracy.

Lead Software Developer

May 2024 – Nov 2024

SlugAI

Santa Cruz, CA

- Directed development of 10+ interactive math animations using Python for SlugAI's educational initiative.
- Mentored 25+ students in Python and deep learning fundamentals through weekly sessions.
- Coordinated campus events featuring industry professionals (300K+ cumulative reach).

Undergraduate Tutor

Apr 2024 – Mar 2025

Baskin School of Engineering

Santa Cruz, CA

- Tutored upper-division courses in Computer Architecture and Business Information Systems.
- Graded assignments for 250+ students, providing timely and constructive feedback on their work.

## PROJECTS

Yardbird | Typescript, Next.js, LangChain, Pinecone

- Developed a scalable musician query RAG application; improved retrieval efficiency by 15%.
- Delivered in 6 weeks for Buildspace's 'nights and weekends' challenge.
- Wrote custom UI components on Next.js and leveraged LangChain libraries for the backend.

Soshal | Flutter, Firebase, Google Cloud Platform

- Designed and developed a social app for campus club management using Flutter and Firebase.
- Implemented backend services on Google Cloud to ensure scalability and real-time data updates.
- Successfully deployed the app for the Google Student Developer Challenge (2024).

## AWARDS/SKILLS

**Programming Languages:** Python, C++, C, SQL, TypeScript, Java, Dart

**Awards:** NSF REU in Computing (2024), Dean's Research Award (2025), Dean's Honor List (6x, 2023-2025)

**Technologies:** Docker, Kubernetes, UV, Jenkins, AWS, Firebase, Flutter, GCP, Pinecone, Unix/Linux