

# Nathan Sit

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## EXPERIENCE

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### Semantic AI

San Diego, CA

Software Engineer

May 2023 – April 2024

- Optimized backend API endpoints using Hibernate to achieve a 3x speedup in entity data load times, resulting in a responsive and accessible web user interface for Cortex EIP's report generator
- Streamlined 400 thousand lines of Java code through refactoring, resulting in a 5% reduction in developer mode startup time
- Debugged a range of frontend (Angular & TypeScript) and backend (Spring) issues across enterprise web application
- Led a code quality initiative, identifying and addressing code and dependency vulnerabilities using static code analysis tools
- Improved code reliability through reviewing pull requests (PRs) and engaging in test-driven development (TDD) by writing unit and integration tests
- Initiated deployment processes using Jenkins, AWS ParkMyCloud, and Azure for code stability and efficient operations.
- Worked in a full remote international context while in regular contact with the CTO to improve the user experience

### General Atomics

Poway, CA

Software Engineer Intern

July 2021 – September 2021

- Designed and implemented a C application displaying real-time radar status, facilitating efficient system integration for the software development team
- Streamlined the build and release process for next-generation radar software by updating the Bash build script for better integration with the Source Code Management (SCM) system

### UCSD Computer Science and Engineering

San Diego, CA

Undergraduate Tutor

January 2021 – December 2021

- Updated automated test cases for programming assignments, maintaining accurate grading of student work
- Held open office hours to provide individualized assistance to students in their Java data structure assignments

## PROJECTS

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### Company Portal

- Collaborated with 10 other developers in an Agile environment to create payroll system for 100+ employees at Royal Emerald Pharmaceuticals
- Implemented full-stack web app using Vue (frontend), MySQL (database), Node.js, and Express (backend)
- Organized UI templates in Figma for consistent design and coordinated use of Git as a version control system

### UCSD Autograder

autograder.ucsd.edu

- Contributed to a large-scale tutor queue and homework grading system used by over 3000 UCSD CS students
- Assisted with updating test cases and shadowed development of new site, built in Flask Python and React

## EDUCATION

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University of California San Diego

San Diego, CA

B.S. in Computer Engineering

June 2023

Relevant Coursework: Data Structures & Algorithms, Networks, Operating Systems, Computer Architecture, Cybersecurity

## SKILLS

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**Technical Skills:** Java, Spring Boot, C, C++, JavaScript, Python, TypeScript, React, Angular, SQL, Bash Shell Scripting, Regex

**Tools:** Java Debugger (JDB), Git, IntelliJ, GDB (GNU Debugger), Jira, BitBucket, Docker, Kafka, Linux, Postman

**Open Source Contributions:** Edits to Cloudflare Pingora and Apache Maven Daemon (mvnd) on GitHub, open-source System Programming (diveintosystems.org) and Operating Systems textbooks, an SQL tutorial, and others