Charles Alders

Santa Cruz, CA 95062

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GitHub

CS&E graduate student at UC Santa Cruz. Self-motivated learner and Software Engineer. Experience in distributed database systems, development operations, RESTful API development, and software/database testing. Passionate about all things data and technology.

Skills

Python, JavaScript/TypeScript, Java, Kotlin, C++, Apache Cassandra, CQL/SQL, AWS, Google Cloud, bash/zsh, Linux (Debian/NixOS), Git/GitHub, Docker, Flask, Graph Databases, Jenkins

Education

M.S. Computer Science & Engineering   Sep 2024 - Dec 2025 (Expected)

University of California, Santa Cruz - Santa Cruz, CA

B.S. Business Administration: Project Management   Aug 2018 - Dec 2022

Regis University - Denver, CO

Experience

SDE Intern   Jun 2025 - Present

Amazon - Bellevue, WA

AWS Keyspaces - Data Storage, Access, and Management Team

Teaching Assistant   Jan 2025 - Jun 2025

University of California, Santa Cruz - Santa Cruz, CA

CSE123B - Engineering Design Project II - Spring 2025

- Assisted five groups of 4-6 students with cloud infrastructure and web application setup for two-quarter-long prototype IoT devices.

CSE111 - Advanced Programming (C++) - Winter 2025

- Guided 50+ undergraduate students through a quarter-long C++ group project.
- Performed code reviews with groups of 4-6 students, giving feedback on code quality.

Software Engineer Intern   Jan 2025 - May 2025

Archon.gg - Remote (Contract)

- Significantly improved accuracy of LLM-powered code generator for warcraftlogs.com by taking trainingcode example count from 5 to 50+.

Software Engineer   Apr 2023 - Jan 2025

X5E, Inc. - Remote (Contract)

- Primarily focused on the development of open source distributed DBMS based on Conflict-Free Replicated Data Types, with TypeScript and Python implementations.
- Implemented additional data stores, data structures, integration tests, unit tests, and database performance tests in both Python and TypeScript.
- Oversaw all development operations by utilizing GitHub actions, Docker, and Jenkins to automate builds and tests across multiple operating systems and architectures.
- Automated package publishing and documentation generation utilizing language specific tools (e.g., readthedocs).
- Created and optimized algorithms for data retrieval, creation, and synchronization.