


Nico Wong

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Skills

Programming Languages: Java, C++, Python
Frameworks: Spring, JUnit, Mockito, Guice dependency injection
Other: Agile Scrum, Linux/Unix, DevOps, CI/CD, Git, ETL, OOP, IaC, APIs, OSI, AWS S3, AWS IAM, AWS CloudFormation, NoSQL graph databases, Distributed Systems (multi-threading, concurrency, networking)

Employment

Amazon

Sep 2022 – Jan 2023

Software Development Engineer I

- Developed and tested an API and corresponding business logic which was critical to product metadata for Amazon.com and internally consumed by 6 software engineering teams
- Maintained an Amazon Neptune graph database management system which stores over two million nodes and edges using the Apache Gremlin graph traversal language
- Participated in the full software development lifecycle using Git, code reviews, CI/CD, AWS monitors, and other AWS microservices to deliver highly reliable software with high software standards
- Leveraged test-driven development using JUnit and Mockito to write unit, integration, and end-to-end tests for a large-scale Java codebase
- Automated test report generation by leveraging infrastructure as code tooling which saved time spent debugging every Agile software development cycle

Amazon

Summer 2021

Software Development Engineer I, Intern

- Contributed to the convergence of two database systems by developing an ETL in Java which ultimately led to the reduction of a redundant database system and impacted 5 engineering teams
- Optimized an algorithm to handle large data extraction and transformation which converted 300,000 CSV records into over 1,000,000 graph entities in an Amazon Neptune graph database

Projects

Distributed Key-Value Database

Winter 2021

<https://github.com/nicomwong/distribute-database>

- Created a distributed key-value database by implementing the Paxos protocol in Python using multi-threading and socket programming to handle concurrent program flows in a distributed system
- Resolved complex race conditions by allowing servers to log the messages they see in the network which guaranteed that the database remained consistent and reliable

Education

B.S. Computer Engineering, UC Santa Barbara

Graduated 2022

GPA: 3.89
Honors: Dean's Honors
Coursework: Object-Oriented Programming, Data Structures and Algorithms, Networking, Distributed Systems, Operating Systems, Embedded Systems, Compilers, Advanced Applications Programming, Machine Learning, Artificial Intelligence