Nico Wong

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Skills

Programming Languages:	Java, C++, Python, JavaScript, SQL
Frameworks:	React, Spring, JUnit, Mockito, Guice dependency injection
Other:	Agile/Scrum, Git, Linux/Unix, CI/CD, ETL, OOP, IaC, APIs, OSI, GDBMS, AWS (S3, IAM, CloudFormation, etc.), NoSQL graph databases, distributed systems, multi-threading, concurrency, parallelism

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 other software engineering teams
- Maintained an Amazon Neptune graph database management system which stored over two million nodes and edges using the Apache Gremlin graph traversal and query 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 under high software standards
- Leveraged test-driven development using JUnit, Mockito, Guice, and Apache libraries to write unit, integration, and end-to-end tests for a large-scale codebase in Java
- Automated JUnit test report generation by leveraging infrastructure as code software which saved time spent debugging deployment failures 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 which ultimately removed a redundant database system and positively impacted at least 5 engineering teams
- Optimized the ETL algorithm to handle large data processing to convert 300,000 CSV records to 1,000,000 graph nodes and edges within an Amazon Neptune graph database management system

Projects

Distributed Key-Value Database Winter 2021

https://github.com/nicomwong/distributed-database

- Implemented the Paxos protocol to create a distributed key-value database 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 which guaranteed the reliability, consistency, and safety properties of the database in the distributed system

Education

B.S. Computer Engineering, UC Santa Barbara Graduated 2022

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