Sammy Tran sammyqtran@gmail.com

sammyqtran.github.io ❖ (408) 910-0535 ❖ San Jose, CA

SKILLS

- Languages: Java, C++, Python, SQL (PostgreSQL), Go
- Cloud & Infrastructure**:** AWS (EC2, S3, EMR, CloudWatch, IAM), Docker, Linux, Redis
- Frameworks & Tools: Apache Maven, Log4J, Hadoop, HDFS
- Version Control: Git, GitHub, CI/CD Pipelines, REST APIs, Microservices

WORK EXPERIENCE

Amazon Web Services (Amazon EMR) **Apr 2022 – July 2023**

Software Development Engineer *Seattle, WA*

- Developed features in Java for interconnected EC2 Linux instances within EMR clusters, collaborating with cross-functional teams to align with business objectives
- Optimized distributed file tracking systems using Java and OS metadata, enhancing storage efficiency across EC2 hosted clusters
- Optimized the log uploading algorithm to S3, improving partial log handling, reducing data loss incidents by 5%, and improving overall system resilience
- Resolved 90% of support tickets within 24 hours, diagnosing and troubleshooting distributed system failures to improve fault tolerance
- Developed and tested critical EMR fixes, launching integration tests on clustered EC2 servers to ensure system reliability at scale
- Assisted in onboarding new engineers and interns, providing guidance on distributed system debugging and resiliency best practices

PROJECTS

Receipt Processing REST API | Java, Docker, JSON APIs **Feb 2025 – March 2025**

- Built containerized microservice that processes receipt data and calculates reward points using complex business rule algorithms for high-volume transaction processing
- Designed RESTful API endpoints with UUID-based data management and JSON request/response handling
- Implemented dockerized deployment solution for consistent cross-platform execution and scalability

URL Shortening Service | Go, Redis, REST APIs, Unit Testing **May 2025 – Present**

- Developed scalable URL shortening service in Go with Redis persistence and comprehensive unit testing (90%+ coverage)
- Architected distributed system design with load balancing considerations and health monitoring endpoints
- Built production-ready REST API with JSON processing and automated redirect functionality

Autocomplete CLI Tool | C++, Performance Optimization **Jan 2024 – Feb 2024**

- Developed an autocomplete feature for a dictionary searching program that suggests word completions as users type
- Automated builds with Meson, debugged issues using GDB, and optimized memory usage by fixing leaks with Valgrind

EDUCATION

University of California, San Diego **June, 2020**

Bachelor of Science in Mathematics–Computer Science *La Jolla, CA*