

# Sammy Tran sammyqtran@gmail.com

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## SKILLS

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- Languages: Java, C++, Python, SQL (PostgreSQL)
- Cloud & Infrastructure: AWS (EC2, S3, EMR, CloudWatch, IAM), Docker, Linux
- Frameworks & Tools: Apache Maven, Log4J, Hadoop, HDFS, React, Node.js
- Version Control: Git, GitHub, Internal CI/CD Pipeline

## WORK EXPERIENCE

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### 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

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### Receipt Processing Backend System

- Designed and implemented a backend system to process receipt data and calculate points.
- Developed a robust API to validate and process receipt submissions.
- Optimized backend performance by streamlining data validation, processing logic, and enhancing rule execution efficiency to handle large-scale receipt data.

### Task Management Web App

- Built a task management web application to track and organize tasks based on priority and completion status.
- Developed the frontend using React, bundling assets in a Node.js environment for efficient deployment.
- Designed and implemented a RESTful API with Django and Django REST Framework to enable real-time updates and interactions between the frontend and the database via JSON.

### Autocomplete Command Line Program (C++)

- 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

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University of California, San Diego

*Bachelor of Science in Mathematics–Computer Science*

June, 2020

*La Jolla, CA*