

Xufeng (Flynn) Zhang

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Summary

- Enthusiastic software engineer with three years development experience backend and infrastructure using Java.
- Proficient in Java, Python, Spring Boot, AWS, Github and SQL/NoSQL database management (MySQL, PostgreSQL, DynamoDB).

Skills

- Programming Languages: Java.
- Databases: MySQL, PostgreSQL, MongoDB, DynamoDB, Redshift.
- Back-end Frameworks and Tools: Spring Boot, Version Control (Git, Github), Docker, Kubernetes.
- Cloud Computing: AWS (ECR, ECS, EC2, S3, APIGateway, SQS, SNS and Lambda), Google Cloud Platform (GCP).
- Web Development: JavaScript (ES5, ES6)/TypeScript, React, Redux, Node.js, Express, Ruby on Rails, GraphQL.

Professional Experience

Saks.com Inc.

Feb.2022 - Present

Software Development Engineer

San Mateo, United States

- Established getAvailableInventory API (global inventory management service - GIMS) to provide accurate and real-time inventory monitoring system using EC2, ECS, ECR, CloudWatch, NLB and APIGateway.
- Led the API performance testing and set up CloudWatch dashboard in AWS to monitor API metrics.
- Located the API performance bottleneck, optimized code quality and decreased the latency P99 from 1.3k ms to 400 ms under 100 TPS.
- Designed and implemented deployment pipeline with CircleCI that enable unit tests, docker image creation and upload to ECR and ECS tasks updates, which handle the core codebase's deployment from Dev to Prod, increased the service iteration speed by 82%.
- Implemented the data sync-up pipeline that handles 170k write peak every 2 minute from Oracle to DynamoDB using AWS Lambda, S3, SQS and SNS, which decoupled GIMS from legacy system and improved the traffic throughput by 43%.
- Created both Front-end and Back-end of the self-service operation tool utilizing IBM Sterling OOTB APIs and Unix shell to control stores on&off and automate inventory allocation.

Virgin Pulse

May.2021 - Feb.2022

Software Engineer

Fremont, United States

- Created the database schema to fix mis-mapping issues during the seeding process of 500K+ rows of data in order to unblock the facility file ETL flow which added and updated facilities IDs in the back-end server.
- Factored the code logic in middleware service using GraphQL to support hierarchy filtering mechanism.
- Implemented Back-end systems and interfaces for database administration in PostgreSQL using Java, Node.js, Express.js and Spring, which reduced the development time by 10%.
- Optimized re-indexing process of 200K+ rows of consumer data to improve the query performance by 6% with Elasticsearch.
- Formed dynamic Front-end with NPM, Webpack, ReactJS and Redux-Saga to enhance page rendering performance.
- Launched 40+ unit tests for multiple modules to raise the test coverage by 20.6%.

Amazon Web Services

Jun.2019 - Sep.2019

Software Development Engineer (SDE) Intern

Detroit, United States

- Designed and developed data migration workflow, which supports 2 million rows authorization data backfill and streaming from a NoSQL database (DynamoDB) to a SQL database (Redshift) for external business teams to analyze customers' behavior, which increased transaction volume by 12%.
- Led technical design documents' preparation using UML data model representation.
- Established and upgraded conversion expression and XML schema to transform data format from Amazon Ion to tab-separated values, improved the conversion efficiency by more than 10%.
- Implemented API monitors and alarms to monitor Fatal and Latency of APIs for the end point of the API Gateway through Java and Junit5 tests to reduce the tickets by 40%.
- Devised 5+ Back-end configuration files to parse API metrics in JSON files using Jackson to achieve higher parsing speed based on the JSON conversion performance benchmark test results between Gson and Jackson.

Education

Santa Clara University

Sep. 2018 - Jun. 2020

M.S. in Computer Science and Engineering

Santa Clara, CA