

SURYA ROHIT VADALI

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EDUCATION

University of California, Irvine | Irvine, CA

Expected Dec 2023

Master of Computer Science, GPA: 4.0/4.0

Current Coursework: Algorithm Applications, Text Processing, Computer Security, Artificial Intelligence

University of Mumbai | Mumbai, MH, India

May 2019

Bachelor of Engineering in Computer Engineering, GPA: 3.73/4.0

Relevant Coursework: Data Structures & Algorithms, Distributed Databases, System Programming, Machine Learning

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, C++, JavaScript
- **Technologies/Frameworks:** Spring Boot/MVC, Apache Camel, Apache Kafka, Activiti, Camunda, Mulesoft, RabbitMQ, Django, Node.js, AWS, React.js, HTML, CSS, Zipkin, Grafana
- **Developer Tools:** VS Code, Eclipse, IntelliJ, Git/GitHub, Slack, Jenkins, Jira, Docker, Openshift4, Consul, Splunk
- **Database:** Oracle, PL/SQL, Elasticsearch, MySQL, MongoDB, PostgreSQL

PROFESSIONAL EXPERIENCE

Software Developer | TIAA, Mumbai, India

Jul 2019 - Jun 2022

Case Management System for Financial Transactions

- Saved **\$3M** in licensing fees by creating an enterprise-wide scalable workflow system to process over **500K** financial cases daily using open-source tech like Spring Boot, Apache Camel & Kafka
- Improved batch processing capability by **9 times** by optimizing SQL/PLSQL scripts and multi-threading
- Spearheaded RESTful micro-service architecture design utilizing coexistence sunset patterns and distributed tracing to ease maintainability and reduce time-to-market by **30%**
- Developed **up to 20** monitoring and alerting jobs using the Spring Quartz scheduler
- Migrated Activiti BPMN workflows to Camunda and optimized adoption via federated containers for **10+ teams**

Fast Data Layer

- Improved performance of distributed search queries across workflow engines by **70%** by leading a cross-functional team to create a fast data layer using Elasticsearch and Apache Camel
- Ensured **200%** faster near real-time updates to the Elastic Cluster by formulating an asynchronous consistency mechanism via IBM MQ integrated with Camel service connectors
- Reduced licensing cost by **\$50K** by converting existing middleware REST APIs from Mule to Camel

Chaos Engineering Platform

- Collaborated with a **team of 4** to develop a plug-and-play artifact to administer chaos engineering principles via experiments in systems to test resiliency and reliability across data centers
Integrated with enterprise deployment management and observed a **23%** reduction in PROD UAT failures

ACADEMIC PROJECTS

CareDex - Hybrid Cloud Platform | Spring boot, RabbitMQ, AWS EC2, PostgreSQL, Docker

Mar 2023 - Jun 2023

- Devised a hybrid solution to streamline data aggregation across **three** senior healthcare facilities and enhance disaster preparedness
- Setup message queues using RabbitMQ broker to push real-time sensor data with at-most-once configuration
- Orchestrated integration of services, databases, and queues using docker-compose, enabling a **60%** reduction in scale time
- Provided Grafana dashboards equipped with role-based access control, ensuring accessible data visualization for stakeholders

Media Server with MPEG-DASH | Django, FFMpeg, Bootstrap, SQLite3

Sep 2018 - Mar 2019

- Built a Django web server to work as an internal CDN for an institution catering to more than **1000** students
- Employed Dynamic Adaptive Streaming to adjust video content delivery in real-time (240p to 1080p) adapting to available bandwidth and users in the network, reducing buffering probability by **50%**
- Implemented collaborative filtering to suggest video lectures based on users' history; developed a user interface for professors to view engagement metrics