

Vaibhav Gcharge

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SKILLS

LANGUAGES

Java 17, Python3
Typescript, JavaScript ES6
SQL, PL-SQL

CLOUD TECHNOLOGIES

AWS API Gateway, Lambda
AWS Step Functions, Fargate
AWS SQS, SNS, IAM
AWS S3, Kinesis, EventBridge
Azure Event Grid, Functions
Docker, Kubernetes

JAVA TECHNOLOGIES

Spring Core (IoC, AOP)
Spring Boot, MVC, WebFlux
Spring Data (JPA, JDBC)
Spring Batch, SpEL
Kafka Pub/Sub, Hibernate

DATABASES & CACHES

NoSQL - AWS DynamoDB
RDBMS - PostgreSQL, Oracle
Redis, Hazelcast

WEB FRAMEWORKS & LIBRARIES

ReactJS, Angular 8
Redux Toolkit
Airflow, Swagger (OpenAPI)
JUnit, PowerMockito
FindBugs, Cucumber

TOOLS & PLATFORMS

Gitlab, Maven, Jenkins,
Excalidraw, draw.io
Sonarqube, Redocly
Dashbird, DataDog APM

INFRASTRUCTURE AS A CODE

Terraform, Terraspace
Ansible, Helm Charts

OTHERS

Event-Driven Architecture
REST/WS, BFF pattern
Performance Tuning, TDD, BDD
Agile (Kanban, Sprints)
Team Leadership

PROFESSIONAL SUMMARY

Senior Software Engineer with **10+** years of experience in delivering high-performance, fault-tolerant trading systems for **FX** markets and complex **financial applications**. A proven engineering leader, adept at collaborating with teams to build robust, scalable solutions that process millions in daily trading volume. Brings deep technical expertise in **distributed systems**, **low-latency design**, and **Java 17+**, paired with financial domain knowledge, and a strong sense of **ownership**.

EXPERIENCE

LONDON STOCK EXCHANGE (LSEG) | FX TRADING SYSTEMS DEVELOPER

📅 Apr 2024 – Present | Software Developer, Low Latency | via TEKsystems | 📍 Singapore

FXall - is the e-trading platform with **200+** liquidity providers in over **500** currency pairs. Trading spot, forwards, swaps, NDFs, and options leveraging fixing, resting, and algorithmic orders.

- Led the design and implementation of a low-latency (Java 17) Kafka-based **market data subscription** service for **FX rates**, enabling real-time auto-execution of **RFQs** for FX trades (e.g., **Spot, Forwards**) based on user-configurable order matching criteria.
- Engineered high-performance cross-currency **price interpolation** algorithms in Java, improving broken-dated order accuracy by **30%** and enhancing real-time pricing visibility on **trading blotters** through close collaboration with Product Owners.
- Implemented real-time FX quote updates on the Order Blotter by architecting a **WebSocket-based** (SockJs) Backend for Frontend (**BFF**) communication layer, enabling low-latency market data synchronization between backend services and the client UI.
- Successfully integrated **FX-SSP product** type support into the **RFQ** workflow and **FIX-based** order execution, leveraging the **QuickFIX/J** for seamless communication with the venue.
- Developed **Market Data Simulator** service to enhance **FX RFQ & Order** execution testing, resulting in a **30%** increase in test coverage and a **25%** reduction in test execution time.
- Led a **DevOps** initiative to implement **Azure Workload Identity**, streamlining authentication between application pods and Azure resources, reducing operational overhead.
- Architected a comprehensive observability solution with **Micrometer** and **DataDog**, delivering **99.95%** SLOs for latency and availability while providing real-time performance visibility to drive reliability improvements.
- Implemented a fault-tolerant **Hot/Standby** leader election system in Java for the Pricing Data service, reducing infrastructure costs while ensuring zero-downtime failover capability.
- Developed highly responsive, **React/Redux based UI** components to display **real-time streaming price data** on the order blotter, enhancing trader visibility and decision-making.

M-DAQ PTE. LTD. | SENIOR SOFTWARE ENGINEER | FX PRODUCTS

📅 Feb 2022 – Jan 2024 | Greenfield Project | 📍 Singapore

Multi-currency e-wallet and Payments platform - An innovative **FX** product, offering **multi-currency** digital wallet, physical/virtual card issuance and **cross-border** payments.

- Architected and launched a resilient digital card management platform, integrating complex partner APIs to deliver a frictionless customer experience. Drove 30% growth in new card activations and 20% increase in customer satisfaction.
- Drove a 25% increase in digital wallet creation speed, while sustaining 99.99% data consistency and handling 10,000+ concurrent requests per second, by implementing a high-performance, event-driven architecture.
- Developed a highly available, fault-tolerant **P2P** wallet transfer component using **AWS Step Functions** and the **Saga** pattern, reducing transaction rollback time from minutes to seconds through automated compensation.
- Developed a notification service using the **Transactional Outbox** pattern, resulting in a **99.99%** delivery rate and reducing data inconsistencies by **80%**.
- Drove a strategic AWS cost optimization program, leveraging Cost Explorer to identify and implement \$5K in monthly cloud savings.

EDUCATION

B.E, COMPUTER ENGINEERING

UNIVERSITY OF MUMBAI

📅 Jun 2014 | 📍 Mumbai, India

Graduated with Honors

CERTIFICATIONS

AWS -

- Solution Architect Associate
- Serverless Computing

MS - Azure Fundamentals

Lightbend - Reactive Microservices

IBM -

- Principles of Reactive Architecture
- Building Scalable Systems
- Distributed Messaging Patterns
- CQRS & Event Sourcing

RECOGNITION &

INTERESTS

- Awarded Aurionpro's

Rising Star title.

- Writing technical articles.

- Attending tech events and conferences.

OVERALL

EXPERIENCE

10 YRS

(July 2024)

WORK

AUTHORIZATION

Employment Pass Holder

LANGUAGES

PROFICIENCY

WRITTEN & SPOKEN

English - Full Professional

Hindi, Marathi - Bilingual

Proficiency

UBS AG SINGAPORE | SENIOR SOFTWARE DEVELOPER | WEALTH MANAGEMENT

📅 Oct 2020 – Dec 2021 | via Luxoft IT Pte. Ltd | 📍 Singapore

Global Risk Analytics & Calculation Engine (GRACE)

A highly scalable risk computing platform supporting **UBS's Wealth Management** globally.

- Designed and implemented a **low-latency historical simulation (VaR)** service for daily financial instrument prices (stocks, ETFs), reducing portfolio evaluation processing time by **90%**, enabling **real-time** risk assessment and improved portfolio management strategies.
- Led the technical debt and performance optimization, facilitating proactive identification and achieving a **20%** monthly reduction in critical **technical debt**.
- Designed and implemented highly scalable Spring Boot service for retrieving Value At Risk (**VaR**) ratios for financial instruments (such as Stocks, Bonds) using non-blocking **Reactive Spring - WebFlux** and deployed as pods on **Kubernetes**.
- Automated coordination between file transfer and data storage services using Azure Event Hub and K8s Horizontal Pod Autoscaling, achieving an **80%** performance improvement.
- Implemented a Cache Loader Service using the **Azure SDK** to update system-functional configuration parameters in Redis, achieving a **20x** reduction in read times.
- Achieved **sub-millisecond** start time latency by implementing a scalable real-time data processing solution using Spring Boot, the Fabric8 library, and Helm charts. This eliminated manual execution, improving user experience and **SLA**.

ACCENTURE SINGAPORE | SENIOR SOFTWARE ENGINEER | PUBLIC SERVICES

📅 Apr 2019 – Sep 2020 | via Spencer Ogden Pte Ltd | 📍 Singapore

A landmark project to modernize Singapore's Central Provident Fund (CPF) applications and transform digital services to make savings a simpler, accessible, and personalised experience.

- Developed Angular 8 UIs, with distributed RESTful backend; optimized using the reverse proxy caching technique, reducing response time by **80%** and database calls by **50%**.
- Reduced Batch run-time by almost **60%** by implementing Spring Batch's multithreaded, parallel chunk processing, and partitioning techniques.

INTEGRO TECHNOLOGIES PTE. LTD. | SOFTWARE ENGINEER

📅 Sep 2016 – Mar 2019 | United Overseas Bank | 📍 Singapore

Vehicle Loan origination - system with streamlined Management of Collateral, Limits & Exposures.

- Designed and implemented multiple microservices using the **CQRS** pattern to segregate read and write operations, resulting in an 80% decrease in write latency.
- Successfully led the migration of **10+** critical **SOAP**-based services to **RESTful** architecture, modernizing our infrastructure and resulting in an **80%** reduction in development time.
- Streamlined web-service response XML generation, achieving a **60%** performance boost, by migrating from in-memory processing to native **XQuery** function within the Oracle database.

SmartLender offers end-to-end Credit Loan Origination, Assessment, and Management.

- Implemented the **Observer** pattern using **Java Annotations/Reflection** to capture user actions as events within a monolithic system, achieving asynchronous processing.
- Built **IBM MQ**-based P2P data exchange between the bank's internal systems using **JMS APIs** and enabled communication with the fraud detection service using XML data format.

AURIONPRO SOLUTION LTD. | SOFTWARE ENGINEER

📅 Jul 2014 - Aug 2016 | United Overseas Bank | 📍 Mumbai, India

SME Loan Origination A Lending System for SME borrowers with Collateral and financial analysis.

- Implemented **25+ new** features including KYC compliance, Islamic financing, and batch jobs, leveraging **SOA architecture** for improved bank-wide Knowledge Discovery (**KDD**) process.
- Designed and built multiple microservice-based **RESTful APIs** exposing critical business workflows of the system, achieving a **80%** improvement in business **SLA** response times.