

UMAKANT VASHISHTHA

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PROFESSIONAL EXPERIENCE

RAZORPAY

Senior Software Engineer

Software Development Engineer

Bengaluru, India

2023 OCT-Present

2022 APR-2023 OCT

- Led the complete architecture, design and development of a microservice for managing and verifying vendors KYC details for onboarding and editing vendor with approval workflows with a team of 6+ engineers, setup on-call process with visibility via metrics and alerts, optimized bottlenecks, powered 1500+ vendors for 10+ merchants with 500+ RPS
- Mentored juniors and created guidelines for backend development for minimizing code review process
- Created Razorpay's VS Code Extension to enable GenAI Powered single-click Payment Integration - [LinkedIn](#), [Youtube](#)
- Worked on Pricing/Billing systems, complex batch processing system to recover fee as per usage equipped with **atomicity & retry mechanisms**. Found loopholes, removed pitfalls and improved performance to scale for a larger number of customers, reducing the leakage of automated fee collection by ~80%. Used **AWS SQS** for **queue**, as **Redis** for **mutex**, set up critical alerts. Later built dashboard for visibility into the performance of **fee recovery**, implemented with data analytics through Looker
- Owned the solutioning and led the development as engineering owner of big bet projects such as supporting multiple **Current Accounts** for 30+ enterprise customers, migration and onboarding of ~50k customers from existing unsupported payout system to new **Pay-On-Behalf-Of** scheme as per RBI guidelines, ensured **good planning** and **timely delivery** for time-sensitive projects, having multiple components with different stakeholders
- Found bottlenecks in existing slow APIs by **profiling** (using **Go's pprof**) and monitoring (**Grafana, prometheus**) and improved performance by **optimizing SQL queries** and **replacing slow packages**, reducing latency from 8s to 200ms
- Led the design, development and delivery for **collaborative platform** to manage **onboarding** and **activation** of Current Accounts at RazorpayX, features like reporting, comments, status management while maintaining backward compatibility requiring data migration. Enhanced the **conversion funnel up to 45%** by **automating** certain actions of **document generation** and **email communications** and creating internal dashboard and tools to facilitate easy operational activities
- Carried out **critical reviews of PRs and Tech Specs** to ensure following of design patterns, best practices and test-driven development with **backward compatibility** and retry mechanisms, mentored interns and juniors and helped with providing solutions, and gaining knowledge around product and codebase
- Spearheaded planning and migration of our pod's code module from **PHP monolith** to **Golang microservice serving 70k+ merchants**
- Maintained and monitored services owned by pod and managing on-call responsibilities, tech stack includes **Docker, Kubernetes, Kafka**, Observability (Prometheus, Grafana, Sumologic, Hypertrace, Jaeger, etc)

BUTTERPAPER/GO4LIFE

Founding Full-Stack Software Developer

Full-Stack Developer Intern

Gurgaon, India

2021 MAR-2022 MAR

2020 NOV-2021 MAR

- I laid the foundation and later led the development of a complete **agri-tech e-commerce SaaS platform**, having multiple components like cross platform **Customer App (React-native)**, **Admin Dashboard (React)**, **Delivery App (React native)**, **Analytics Dashboard (Metabase)** with complex requirements from scratch using GraphQL, Postgres and Node.js in backend
- Later, hired a team of 4 developers and interns, led the Completely managed Design, Development, Deployment & Monitoring with a team of hired 2 Software Developers and 2 Interns, it served 20k+ active customers for ~10 clients (Peak throughput: 2000+ rpm)
- Developed a **delivery management system** which handled - **assignment of orders** to delivery executives based on location, submission of assigned deliveries by a rider, dashboard to view the **live locations of riders** and **delivered orders**

- Migrated platform to support **multiple organizations for the SaaS model** to build customized on-demand application builds for each organization in matter of hours and go live on Play Store and App Store in just a few days
- Took decisions pertaining to the technology used, development and deployment workflow, directly reviewed code written by the team for security issues. Designed and implemented an end-to-end traceability solution

CREDFLOW

Full-Stack Developer Engineer

Full-Stack Developer Intern

Delhi, India

2020 AUG-2020 Nov

2020 MAY-2020 JUL

- I was a full stack web developer in a team of 3 people - I designed and implemented features such as Subscription Management, CRM, Analytical Dashboard containing Sales, Collections, Outstanding and Average Collection Period Trends, Incentive Scheme Management, Avg. Payment Period, Payment Projection, Admin-Panel, SMS Credit System, serving 100+ organizations and processing 500k+ invoices and 10k+ tasks
- I suggested potential features, improvements in security and some task automation. It helped us secure our users account and prevented potential threats from some malicious party
- Worked on AWS SES & Lambda to automate email forwarding

SKILLS

- **Programming Languages:** Golang, Java, Typescript, JavaScript, PHP, Python, C++
- **Development:**
 - **Backend:** Mux, Gorm, Spring, Hibernate, Node.js, GraphQL, Express, Sequelize, Apache Kafka/RabbitMQ, AWS SQS, Socket.io, Nestjs, Cadence, Flask
 - **Fontend:** React, Redux, React-Native, Next.js
- **DevOps:** AWS(EC2, RDS, S3, EB), Heroku, Docker, Kubernetes, CI/CD
- **Databases:** PostgreSQL, MySQL, MongoDB, Redis, ElasticSearch
- **Observability:** Prometheus, Grafana, Sumologic, Jaeger Tracing, Hypertrace, pprof, Metrics, Logging, Alerts
- System Architecture, Scalable Distributed Systems, Microservices, System Design, High-level design, Low-level design, Algorithms, Data Structures, Structured Logging, Test Driven Development using stubs and mocks

EDUCATION

DELHI TECHNOLOGICAL UNIVERSITY

Bachelor of Technology

Delhi, India

2017-2021

- Awards: GPA: 8.01

PROJECTS, RESOURCES & OPEN-SOURCE CONTRIBUTION

- Open Source
 - VS Code Github Pull Requests Extension: [Feature: Auto Populate Labels, Release](#)
- [Youtube Channel](#) for teaching development
- [Blog and learning resources](#)
- [nextjs-blog-app](#) - Open Source
- [blog-server](#) (with metrics and traces) - Open Source
- [prometheus-grafana-dashboard](#) - Open Source
- Frontend mini projects
 - [Digitests](#), [Markdown-Editor](#), [Elevator Algorithm](#), [json-validator](#), [Digit Recognition](#), [Sudoku](#), [Checkers](#), [Minesweeper](#), [Ping Pong](#), etc

ACCOMPLISHMENTS

- Xtar of the Month Award at RazorpayX
- Best Team Award at Razorpay, multiple spot awards
- 4 Stars on CodeChef (1866) Country Rank: 7154

- 5 Stars in Problem Solving on HackerRank
- Scored above 98 percentile in JEE Main, ranked 19469 out of 1186000
- Stood 3rd in School in IMO Math Olympiad in 10th grade