Utsav Rawat

San Jose, CA | 669 278 9608 | utrawat27@gmail.com | GitHub | LinkedIn

EDUCATION

M.S., Software Engineering – San Jose State University
AUG 2022 - MAY 2024
Coursework: Software System Engineering, Software Enterprise Platform, Cloud Services
G.P.A -3.5/4.0
BTech, Computer Science and Engineering – DIT University
AUG 2015 - MAY 2019
Coursework: Data Structures, System Design, Object Oriented Programming
G.P.A -3.2/4.0

SKILLS

Programming Languages - Java, Python, C, JavaScript, HTML, Linux
Web Technologies -Node.js, React.js, Django, Spring, Spring Boot, REST APIs
Database - MongoDB, MySQL, Oracle, AWS S3, AWS RDS, PostgreSQL, DynamoDB
AWS Services - EC2, CloudFront, S3, Elastic Cache, API gateway, Lambda, ECS, CloudWatch, ECR, EKS, Elastic Bean Stalk, EBS, VPC, IAM
Cloud Technologies - AWS, Azure
CI/CD - Jenkins, Docker, Ansible, Helm, Kubernetes, Terraform, CloudFormation
Tools - Git, Jira, Postman, Linux, RabbitMQ, Postman, Datadog, Maven, Kibana, SonarQube, Apache Kafka, JUnit

PROFESSIONAL EXPERIENCE

Subex Limited– Software Development Engineer
NOV 2019 - JUL 2022
Singtel Optus | Revenue Assurance & Fraud Detection:
Technology Stack: Java, Spring Boot, Hibernate, JPA, MySQL, Apache Kafka, Docker, Kubernetes, Agile

- Developed and maintained highly scalable backend services for Optus mobile, serving 11M+ users, using Java, Spring Boot, and microservices architecture.
- Optimized fraud detection performance, replacing synchronous API calls with Kafka-based event-driven processing, reducing fraud alert delays by 15%, ensuring real-time detection at scale.
- Architected a resilient microservices-based system with Docker, Kubernetes, and Jenkins CI/CD pipeline, leading to an 80% improvement in system uptime and faster deployments.
- Designed and implemented RESTful APIs to facilitate seamless third-party service integration and new feature rollouts.
- Implemented OAuth 2 for secure user authentication and authorization, increasing industry security standards by 60%.
- Led the migration of databases, realizing a remarkable 30% optimization in data storage and retrieval for specific use cases.

PLDT Inc. | Revenue Assurance & Billing System:
Technology Stack: Java, CI/CD, Jenkins, Docker, K8s, JUnit, Spring Boot, MongoDB, Agile

- Developed and implemented Java-based REST APIs using Spring Boot for revenue assurance and accurate billing system.
- Automated deployments, building a CI/CD pipeline with Jenkins, Docker, and Kubernetes, reducing release downtime from 4 hours to few minutes and achieving 90% system availability.
- Integrated connection pooling using HikariCP to manage database connections resolving critical production issues with strong initiative.
- Cut deployment costs by $2K/month through containerized microservices and auto-scaling optimizations, improving resource efficiency.
- Optimized MongoDB queries by implementing compound indexes, query tuning, and sharding, reducing execution time from 5-7 seconds to 2-3 seconds.

ACADEMIC PROJECTS

Kitee Form Builder Application: link
AUG 2023 - DEC 2023
Technology Stack: JavaScript, TypeScript, MongoDB, AWS

- SaaS application enabling customers to create forms and surveys in under 2 mins. Resulting in a 50% reduction in response and analysis time.
- Designed the project leveraging various AWS services such as S3, R53, EC2, CloudFront, Elastic Beanstalk, RDS, ELB, CloudWatch, SNS, AWS Code Pipeline.

Marketplace application: link
FEB 2022 - MAY 2022
Technology Stack: Python, Kubernetes, CI/CD, Docker, React.js, Django, MongoDB

- Designed and developed a virtual marketplace application that enables buyers to purchase used items and sellers to post ads.
- Implemented various integrations, such as Okta and Google SSO, PayPal, Prometheus, and Loki for monitoring, Jenkins CI/CD, Docker, Kubernetes, and SSL certificate management, to enhance the full-stack React-Django-MongoDB web application.

FinFlow Application: link
JUN 2024 - SEP 2024
Technology Stack: Next.js, TailwindCSS, PostgreSQL, Plaid, Stripe; deployed on Vercel

- Finance Management system with an interactive financial dashboard, for tracking income and expenses with customizable charts, including CSV imports and search functionalities.
- Designed and implemented intuitive user interfaces with React.js while streamlining backend processes with Nodejs, enhancing the overall user experience and accessibility.

CERTIFICATIONS

- AWS Solutions Architect – Associate : **link**
- Core Java Developer