

ABHYUSH RAJAK

SOFTWARE ENGINEER

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SUMMARY

- Experienced Software Engineer with 4 years of expertise in designing, developing, and maintaining scalable backend systems using Java Spring Boot, Python Flask, and microservices architecture.
- Proficient in developing and integrating RESTful APIs and GraphQL endpoints, enabling secure, real-time communication between frontend and backend applications.
- Skilled in cloud-native development and deployment on AWS and GCP, including containerization with Docker, orchestration with Kubernetes, and CI/CD automation using Jenkins and GitLab pipelines.
- Experienced in implementing AI/ML modules and NLP-driven solutions, integrating predictive analytics and financial recommendation systems within production environments.
- Strong background in database design and optimization with relational (PostgreSQL, MySQL, Oracle) and NoSQL (MongoDB, Redis) systems, ensuring efficient data storage, retrieval, and processing.
- Adept at implementing security best practices, including OAuth2/JWT authentication, role-based access control, and compliance with internal and industry standards.
- Hands-on experience in software testing and quality assurance, including unit testing, integration testing, and API validation using JUnit, PyTest, Selenium, and Postman, ensuring robust and reliable applications.
- Active participant in Agile Scrum teams, collaborating with cross-functional teams on requirement analysis, sprint planning, backlog grooming, and retrospectives to deliver high-quality software solutions.

SKILLS

Programming Languages: Java, Python, JavaScript, SQL

Frameworks & Libraries: Spring Boot, Spring MVC, Spring Batch, Spring Security, Spring AOP, Hibernate, Struts, Java EE, Django, Flask, FastAPI, React.js, Node.js, Pandas, NumPy, PySpark, TensorFlow, Scikit-learn

Web Technologies: HTML5, CSS3, RESTful APIs, GraphQL, WebSockets, Microservices, JSON, AJAX, JSP, Servlets,

Cloud & DevOps: AWS, GCP, Docker, Kubernetes, Jenkins, GitHub Actions, GitLab CI/CD, Terraform, Ansible, Helm

AI & Machine Learning: AI/LLM Integration (OpenAI, LangChain), Retrieval-Augmented Generation (RAG), NLP

Databases: Firestore, Redis, PostgreSQL, MySQL, MongoDB, Oracle, Snowflake

Agile & Project Tools: Agile, Scrum, JIRA, Confluence, Trello

Other Tools: PyTest, UnitTest, Selenium, Postman, JMeter, JWT, OAuth2, HTTPS, OWASP Top 10, Role-Based Access Control (RBAC), Encryption Standards, Nagios, Prometheus, Splunk, Grafana, Datadog, ELK Stack, Git, GitHub, Bitbucket, GitLab

WORK EXPERIENCE

Visa, California, USA

Aug 2024 – Present

Software Engineer

- Developed and maintained **RESTful APIs for Visa Direct, Merchant Offers, and Merchant Search** using **Java 11, Spring Boot, and Hibernate**, enabling **secure processing of 50,000+ daily transactions** across partner platforms.
- Designed **microservices architecture** with **Spring Boot and Maven**, enabling independent deployment of API modules and scaling to support **2x peak transaction volumes**.
- Implemented **OAuth2** and **Two-Way SSL authentication**, ensuring PCI DSS compliance and reducing potential security risks by 35%.
- Optimized API performance through **Redis caching, asynchronous processing, and database connection pooling**, reducing average response time from **450ms to 320ms**.
- Built and maintained **CI/CD pipelines using Jenkins and GitLab**, automating build, test, and deployment processes, increasing **release efficiency by 25%** and reducing manual errors.
- Containerized microservices with **Docker** and deployed on **Kubernetes**, ensuring **99% uptime** for critical API endpoints in production.
- Implemented **real-time monitoring and logging using Prometheus, Grafana, and ELK Stack**, reducing incident resolution time to **under 15 minutes on average**.
- Conducted **unit and integration testing using JUnit, Mockito, and Postman**, increasing code coverage and reducing post-deployment defects by **20%**.

- Created and maintained **technical documentation and API specifications with Swagger and internal RAG tools**, accelerating developer onboarding by **40%** and reducing integration support requests.
- Collaborated in **Agile Scrum teams**, participating in sprint planning, backlog grooming, and daily stand-ups, delivering **8+ major API enhancements** while maintaining **99% SLA compliance** across partner applications.

Intuit, India

Jul 2020 – Jun 2023

Software Engineer

- Collaborated with product managers and business analysts to gather requirements and translate them into **technical specifications** for backend services and NLP modules, supporting AI-driven financial insights for users.
- Designed a **microservices architecture** using **Java Spring Boot** and **Python Flask**, ensuring modular, scalable, and maintainable services capable of handling **~200,000 daily API requests**.
- Modeled **relational and NoSQL databases** in **PostgreSQL and MongoDB**, optimized queries and indexing, improving data retrieval performance by **20%** and enabling real-time analytics.
- Developed **RESTful APIs** for secure interaction between frontend and backend, supporting user transactions and AI-driven recommendations, which reduced API latency by **25%**.
- Implemented **AI/ML modules** for predictive analytics and expense categorization using **Python (scikit-learn, NLTK)**, achieving **~90% accuracy** in recommendations and increasing user engagement by **18%**.
- Built and optimized **real-time data ingestion pipelines** using **Python, Kafka, and AWS S3**, processing **~1.5 TB of transactional data daily**, reducing data latency by **30%** and enabling faster AI model updates.
- Secured sensitive user data by implementing **OAuth2/JWT authentication** and **role-based access control (RBAC)**, ensuring compliance with internal security policies.
- Deployed services on **AWS EC2, S3, and RDS**, containerized with **Docker**, and automated builds and deployments using **Jenkins**, improving release efficiency by **50%** and system uptime to **99.8%**.
- Developed **unit and integration tests** using **JUnit and PyTest**, achieving **>90% code coverage**, and conducted API testing with **Postman**, reducing production defects by **30%**.
- Monitored application and infrastructure performance using **Nagios and Prometheus**, proactively identifying bottlenecks and reducing system downtime by **40% YoY**.
- Participated in **Agile Scrum processes**, including sprint planning, backlog grooming, and retrospectives, contributing to the timely delivery of **15+ major feature releases**.
- Optimized backend services and AI modules to improve recommendation generation time from **2.5s to 1.6s**, enhancing user experience and satisfaction metrics.

EDUCATION

Master of Science Computer Science

California State University, Long Beach, California, USA | **GPA: 3.5/4**

Bachelor of Technology in Computer Science and Engineering

Hitkarni College of Engineering & Technology, Jabalpur, MP, India | **GPA: 3.5/4**

CERTIFICATIONS

- AWS Certified Cloud Practitioner
- Databases and SQL for Data Science with Python