

Lokesh B

Software Developer | Full-Stack Development, Microservices & Cloud Platforms
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SUMMARY

Software Engineer with 3 years of experience in full-stack development, distributed systems, and cloud-native applications, skilled in Java, Go, Python, and TypeScript with frameworks such as Spring Boot, FastAPI, and React/Next.js. Hands-on experience in building and deploying microservices, developing real-time data pipelines with Kafka, RabbitMQ, and Redis, and integrating machine learning models (TensorFlow, PyTorch, ONNX) into production environments. Proficient in AWS, GCP, Docker, Kubernetes, and Terraform, with practical expertise in implementing CI/CD pipelines using GitHub Actions, Jenkins, and ArgoCD to deliver secure, scalable, and resilient solutions. Strong background in writing test-driven, maintainable code and collaborating in agile cross-functional teams to deliver high-performance, customer-focused software.

Technical Skills

- Languages & Scripting: Java, Python, Go, TypeScript, SQL, Bash
- Frontend Development: React, Next.js, Tailwind CSS, HTML5, CSS3
- Backend & Services: Spring Boot, FastAPI, Express.js, Flask
- APIs & Integrations: REST, GraphQL, gRPC, OpenAPI (Swagger)
- AI/ML & LLMs: TensorFlow, PyTorch, scikit-learn, ONNX, Hugging Face Transformers, LangChain, Vertex AI
- Databases & Caching: PostgreSQL, MySQL, MongoDB, Redis
- Cloud & Infrastructure: AWS (EC2, S3, Lambda), GCP (Cloud Run, GKE), Docker, Kubernetes, Terraform
- DevOps & CI/CD: GitHub Actions, Jenkins, GitLab CI, ArgoCD
- Testing & Quality: JUnit, pytest, Jest, Cypress
- Collaboration & Workflow: Agile Scrum, Jira, Confluence, Slack
- Monitoring & Logging: Prometheus, Grafana, ELK Stack
- UI/UX & Accessibility: Figma, Design Systems, Responsive Design, A11y Compliance
- Messaging & Streaming: Apache Kafka, RabbitMQ, Amazon SQS

EDUCATION

Clark University, Worcester, MA, USA
Master’s Degree in Information Technology- April 2025

Kallam Haranadha Reddy Institute of Technology, Guntur, Andhra Pradesh, India
Bachelor’s Degree in Information Technology -April 2023

PROFESSIONAL EXPERIENCE

Lam ResearchAustin, Tx
SDESept 2024 – Current

Project: AI-Enabled Semiconductor Intelligence Platform
Built a cloud-native platform using AI/ML (TensorFlow, PyTorch, Hugging Face) and streaming data pipelines (Kafka, PostgreSQL, Redis) for predictive maintenance, defect detection, and real-time analytics in semiconductor manufacturing.

- Developed and deployed microservices with gRPC and GraphQL to handle high-volume semiconductor sensor data, improving throughput and system reliability.
- Built real-time analytics dashboards using React and Next.js to monitor equipment health and yield metrics, reducing issue resolution time by 20%.
- Developed and deployed ML models (TensorFlow, Scikit-learn) for predictive maintenance and defect detection, lowering process variation by 10%.
- Designed data pipelines with PostgreSQL, Redis, and Kafka to manage millions of time-series records with sub-second query performance.

- Automated testing and CI/CD workflows using PyTest, JUnit, Docker, and Kubernetes, improving release stability and test coverage by 15%.

Cortracker

Software Engineer

Hyderabad, India

July 2021 – July 2023

Project: Real-Time E-Commerce Personalization & Analytics Platform

Built a cloud-native, real-time e-commerce system that powered personalized recommendations, fraud detection, and live inventory updates, enabling sub-second response times and seamless customer experience during high-traffic events.

- Developed backend services using Java (Spring Boot) and Python (FastAPI) with REST and GraphQL APIs for catalog, cart, and checkout, improving system speed by 15%.
- Built real-time pipelines with Apache Kafka and RabbitMQ to process orders, payments, and cart updates, keeping data consistent across thousands of users in under one second.
- Used AI/ML models with TensorFlow, PyTorch, and Hugging Face for fraud detection, demand forecasting, and product recommendations, improving recommendation clicks by 18%.
- Created front-end features with React, Next.js, and Tailwind CSS to show live inventory updates and offers, keeping page updates under 200ms.
- Deployed the platform on AWS (EKS, Lambda, S3) and GCP (Cloud Run, GKE) using Docker, Kubernetes, and Terraform, ensuring high availability during peak shopping events.

Project: Real-Time Messaging and Collaboration Platform

Contributed to the development of a web-based logistics platform for a transportation client to manage delivery routes, fleet performance, and real-time vehicle status.

- Reduced message delivery time from 400ms to under 150ms by moving from long polling to WebSockets and using Redis Streams for reliable event handling.
- Improved reliability during peak usage by adding Kafka retry queues and partitioning, ensuring no message loss
- Optimized typing indicators and read receipts by batching updates in FastAPI services, cutting redundant requests by 15%.
- Shortened large file upload times by 15% by integrating with GCP Cloud Storage and enabling parallel transfers.
- Lowered downtime by 20% by adding Prometheus and Grafana monitoring, which detected queue failures early.

ACADEMIC PROJECTS

Customer Purchase Behaviour Analysis

- Analyzed retail purchase data using Power BI, Tableau, and Power Query, integrating CSV, Excel, and SQL sources for trend, segmentation, and churn insights.
- Built interactive dashboards for customer lifetime value, repeat purchases, and cohort/RFM analysis.
- Delivered actionable insights that guided targeted marketing strategies and improved inventory planning..

IoT Predictive Maintenance System (Azure + Databricks)

- Designed a data lakehouse in Azure Databricks to manage telemetry from 500+ IoT devices.
- Applied time-series anomaly detection to identify early signs of equipment failure.
- Trained and tested models using Azure Machine Learning for predictive maintenance.

CERTIFICATIONS

- AWS Certified Solutions Architect | Amazon Web Services | 2024
- Data and Technology Transactions Job Simulation | Latham & Watkins LLP | 2025
- Data Visualization: Empowering Business with Effective Insights | Tata | 2025
- Data Analytics Job Simulation | Quantum | 2025