

Shruthi Pillala

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Summary

Software Developer with over 4 years of experience designing and optimizing **Java-based microservices** and **distributed systems** supporting **1M+** daily transactions. Experienced in building **AI-enabled backend applications** using LLM APIs, and delivering measurable improvements including a **60%** reduction in deployment time and improved **API response latency** through **Dockerization**, **Redis caching**, and **event-driven architecture**.

Experience

Dematic

Grand Rapids, MI

Software Engineer

July 2025 – Present

- Refactored backend logic to support modern hardware configurations, improving system reliability and reducing integration errors by **20%** across multiple customer deployments.
- Developed features connecting user interfaces to centralized databases, increasing data tracking accuracy for daily storage and material movement operations by **15%**.

Northwest Missouri State University

Maryville, MO

Software Engineer

August 2024 – May 2025

- Designed and deployed a **Java Spring Boot** full-stack application with **PostgreSQL** to automate academic workflows for **10K+** users, reducing manual processing by **25%**.
- Implemented automated document validation and server-side sanitization using Spring Boot, reducing corrupted file uploads by **30%** and improving data reliability.
- Built **10+ reusable UI components** using **React** and **Tailwind CSS** and partnered with stakeholders to translate requirements into scalable features, improving delivery speed and workflow efficiency by **20%**.

Tata Consultancy Services Ltd

Hyderabad, India

Software Engineer

August 2021 – December 2023

- Designed and maintained **Java Spring Boot** microservices using an **event-driven architecture**, processing **1.2M+** transactions/day with **99.9%** production availability.
- Built high-throughput data integration services using **multi-threaded Java processing**, improving reporting data ingestion speed by **50%** through parallel execution.
- Optimized backend APIs and deployments by implementing **Redis caching**, tuning **PostgreSQL/MongoDB** queries, and migrating to **Dockerized microservices**, reducing latency by **35%** and deployment time by **60%**.

Projects

DevMentor AI | SaaS Career Assistant | Spring Boot, React, AWS, PostgreSQL, Stripe

[Live Link](#)

- Developed a **Spring Boot** SaaS platform utilizing **OpenAI API** to automate resume reviews for **500+** users.
- Implemented secure authentication and payment workflows using **JWT** and **Stripe APIs**, achieving a **15%** conversion rate for premium tiers.

AI Quote Generator | Java, Spring Boot, Spring AI, AWS Lambda, S3

[Live Link](#)

- Built a serverless GenAI application using **Spring AI** and **AWS Lambda**, supporting **1,000+** concurrent LLM inference requests.
- Reduced average response latency by **30%** using asynchronous execution and **AWS S3** for optimized AI output delivery.

Incident Management System | Java, Spring Boot, PostgreSQL, React

- Developed **RESTful** microservices using **Spring Boot** to manage system incidents for **100+** concurrent users.
- Reduced query response times by **40%** via **B-tree indexing** and query optimization in **PostgreSQL**.

Technical Skills

Programming Languages: Java, JavaScript, Python

Frameworks: Spring Boot, Spring, Hibernate, Spring AI

Databases: PostgreSQL, MySQL, Redis

DevOps: Docker, Kubernetes, Jenkins, GitHub Actions

Cloud: AWS (ECS, Lambda, CloudFormation)

Other Skills: Microservices, REST APIs, System Design, Event-Driven Architecture, Prompt Engineering, LLM API Integration

Achievements

- Oracle Certified Professional – MySQL 8.0 Developer
- Awards: Special Achievement, Best Volunteer

Education

Northwest Missouri State University

Maryville, MO

Master of Science in Information Systems

January 2024 – May 2025

Jawaharlal Nehru Technological University

Hyderabad, Telangana

Bachelor of Technology in Electrical & Electronics Engineering

July 2017 – August 2021