# GOPALA SWAMY MUSHINI

SENIOR SOFTWARE ENGINEER

✉ swamymushini@zohomail.in • 📞 +91 911-076-0301 • in linkedIn • ⓞ github • 🌐 portfolio

## WORK EXPERIENCE

**Rocket Software**, *Pune, India*
*Senior Software Engineer*     *Feb. 2022 – Present.*

- Designed and implemented an **Automated billing system**, replacing a manual process and saving over **120+ hours** of manual effort per quarter, while reducing billing errors by **95%**.
- Engineered a cloud-native **API Integration platform** to pull orders from customer e-commerce platforms like **Shopify** and **Amazon Marketplace**, automating fulfillment and integration processes.
- Developed adaptable **Lambda connectors** for seamless integration with additional e-commerce platforms, reducing developer effort and **doubling customer integrations within 6 months**, leading to faster onboarding.
- **Led the development of AI-powered document filtering**, enabling users to retrieve documents using **natural language queries via voice or text input**. Fine-tuned **LLM models like Mistral NeMo 12B** to interpret user queries and generate **filter JSON objects** for document retrieval.
- **Designed AI agents using LangChain** to understand **EDI business terms** and convert user queries into **MongoDB queries**, providing users with **aggregated data** to efficiently query and summarize documents meta data from MongoDB.

**Pennant Technologies**, *Vizag, India*
*Software Engineer*     *Jun. 2019 – Feb. 2022*

- Migrated the monolithic **EOD loan processing system** into a scalable, distributed microservices architecture, achieving a **50% performance improvement** by orchestrating parallel batch processing and running parallel execution of loan records across worker microservices, and implementing event-driven communication via Kafka.
- Engineered a highly resilient and performant system, implementing **database partitioning** and optimized SQL queries to boost **handling capacity by 30%**, while ensuring zero data loss through idempotent processing, retry mechanisms with exponential backoff, and a Dead Letter Queue (DLQ) within a Kubernetes-managed environment.
- Developed an interface for creating **receipts** for EMI payments and partial loan payments, incorporating a **real-time notification system** for upcoming payments and confirmations, with **caching mechanisms** to reduce redundant database queries and improve response times.
- Developed and optimized the **Receipt Upload Functionality**, enabling instant upload of up to **10,000 payment receipts** and improving processing efficiency by **65%** through **multi-threading techniques**.

## TECHNICAL SKILLS

**Languages**: Java, Python, JavaScript

**Frameworks & Libraries**: Spring Boot, REST API, Apache Kafka, Redis, NodeJS, ReactJS

**Databases**: PostgreSQL, MySQL, Oracle, MongoDB, Cassandra

**Cloud & DevOps**: AWS (EC2, EKS, S3, Lambda, SQS, SNS, CloudWatch), Docker, Kubernetes, Jenkins

**Others**: Git, JIRA, Postman, LLM, Ollama, Langchain, RAG, VibeCoding with AI

## EDUCATION

**Scaler Academy**, *Online Course*
*Specialization in Software Engineering (DSA, HLD, LLD, Distributed Systems)*     *Feb. 2022 – May. 2023*

**Jawaharlal Nehru Technological University**, *Andhra Pradesh, India*
*Bachelor of Technology in Electrical Engineering*     *Jul. 2015 – Apr. 2019*

## ACHIEVEMENTS

- **Star Performer Certification (Two Consecutive Years)** *(2020, 2021)*: Recognized for delivering critical financial projects on time and driving innovation in software development, consistently exceeding performance expectations at Pennant Technologies.
- **Spot Award (Three Times in Three Quarters)** *(2023-2025)*: Awarded three times for innovation in adding AI features, adhering to best code practices, and solving critical production bugs through self-willingness and responsibility.
- **Finalist - Rocket Build Hackathon** *(2024)*: Advanced to the finals among 2000 participants, presenting my concept for building an AI Studio for easy development of LLM models.

## PERSONAL PORTFOLIO

- **AI Instagram Memer**: Developed a web-based meme generator using **OpenAI** APIs to generate meme text and post it directly on **Instagram** through APIs.
- **CodeExpert Tool**: Built an **AI**-based VS Code extension serving as a coding assistant for developers, leveraging **Code Llama** LLM and **AWS SageMaker**.