

Karthik Muneeswaran

karthikofficial2002@gmail.com | +91 8778244948

[Portfolio](#) | [LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Software Development Engineer with 3+ years of experience building backend services, full-stack applications, and distributed systems. Experienced in system design, database optimization, and cloud deployments, with end-to-end ownership from requirements and implementation through testing and production operations.

PROFESSIONAL EXPERIENCE

Product Engineer Jun 2025 - Present
Superbotics Multitech Private Limited, Virudhunagar

- Owned end-to-end software delivery, translating business requirements into system designs, production features, and operational improvements.
- Designed fault-tolerant systems for asynchronous and long-running workloads, improving reliability and recovery from downstream failures.
- Identified application and data-access bottlenecks and implemented backend architecture and performance improvements.
- Drove technical planning, design and code reviews, engineering standards, and mentoring while remaining hands-on with implementation.

Full Stack Engineer May 2023 – Jun 2025
Superbotics Multitech Private Limited, Virudhunagar

- Delivered enterprise, CRM, e-commerce, and mobile application features across implementation, integration, testing, deployment, and production support.
- Built reusable application and service components with secure authentication, authorization, input validation, and external integrations.
- Improved release quality through unit, integration, and end-to-end testing, systematic debugging, and production issue resolution.

PROJECTS

- Enquiry Hub – Resilient Full-Stack Platform**
 - Built an enquiry management platform with resilient background processing, controlled failure recovery, and observable operations for demanding workloads.
- Data Processing & Integration Platform – ETL/ELT and Workflow Orchestration**
 - Automated data ingestion, transformation, and movement across source and destination connectors using scalable ETL/ELT pipelines and workflow orchestration.
- Advanced Multi-Agent RAG Platform – Enterprise Knowledge and AI Orchestration**
 - Built a multi-agent RAG platform that made thousands of documents searchable, combining orchestrated retrieval, grounded responses, guardrails, and observability.

TECHNICAL SKILLS

- Languages:** Python, TypeScript, Java, JavaScript, SQL
- Engineering Fundamentals:** Data Structures & Algorithms (DSA), System Design, SOLID Principles, Design Patterns, SDLC
- Backend & Frontend:** Node.js, NestJS, Express.js, Spring Boot, FastAPI, REST APIs, GraphQL, React.js, Next.js, Angular, Vue.js
- Databases & Distributed Systems:** PostgreSQL, MySQL, MongoDB, Redis, Data Modeling, Query Optimization, Microservices, Event-Driven Architecture, Kafka, RabbitMQ
- Cloud & DevOps:** AWS, Docker, Kubernetes, GitHub Actions, CI/CD, Git
- Testing & Observability:** Unit Testing, Integration Testing, Playwright, API Testing, Grafana, Prometheus, ELK Stack
- Data & AI:** ETL/ELT, Apache Airflow, LangChain, LangGraph, RAG, Vector Databases, Langfuse, LoRA, Tool/Function Calling

ACHIEVEMENTS

- Led 6+ engineers in production delivery through hands-on development, architecture, reviews, and mentoring.
- Delivered enterprise, CRM, e-commerce, and mobile solutions from business requirements through launch.

EDUCATION

B.E. in Computer Science and Engineering
AAA College of Engineering and Technology, Sivakasi

2019 - 2023
CGPA: 8.2 / 10