Vamsi Makke

vamsimakke@gmail.com | +1 (513) 537 2384 | LinkedIn | GitHub | LeetCode | Portfolio

Professional Summary

Software Development Engineer with strong foundations in data structures, algorithms, and object-oriented design. Experienced in building scalable cloud-native distributed systems using Java, Python, and AWS through academic and professional experience. Owned backend services end to end from design through production, improving performance and reliability for systems serving 50k+ users. Solved **1500+ LeetCode problems**, achieved a **max contest rating of 1898**, and ranked in the **Top 4.37% globally**.

Technical Skills

Languages: Java, Python, JavaScript, SQL, Bash
Backend and Systems: Spring Boot, REST APIs, Microservices, Apache Kafka, Node.js, Express.js
Cloud and DevOps: AWS, Docker, Kubernetes, CI/CD, GitHub Actions, Jenkins
Databases: PostgreSQL, MySQL, MongoDB, Redis
Core CS: Data Structures and Algorithms, Object Oriented Design, Distributed Systems, System Design

Education

University of Cincinnati, Cincinnati, OH — Jan 2024 – May 2025
Master of Science in Information Technology — **GPA: 4.0 / 4.0**
Vasireddy Venkatadri Institute of Technology, India — Sep 2019 – Apr 2023
Bachelor of Technology in Computer Science and Engineering

Experience

Software Engineer | **TORQ Sports**, Woodland Hills, CA – Remote — Jun 2025 – Present

- Owned backend services supporting core user flows for a consumer facing platform with **50k+ active users**.
- Partnered with frontend and product teams to design and deliver backend features, contributing to technical discussions and aligning solutions with user requirements.
- Evaluated multiple PostgreSQL indexing strategies and optimized for read heavy access patterns, reducing search latency from **1.2s to 450ms**.
- Improved API response times from **800ms to 350ms** by analyzing production bottlenecks and optimizing database access.
- Investigated production regressions using logs and metrics, prioritizing fixes by user impact.
- Reviewed backend pull requests for code quality, performance, and production readiness.
- Used AI assisted development tools (Claude and Cursor) to accelerate debugging, refactoring, and test generation while maintaining code quality and production standards.
- Implemented structured logging and request tracing to improve observability across **100k+ daily requests**.

Software Engineer Intern | **Cognizant Technology Solutions**, India — Mar 2023 – Jul 2023

- Developed and maintained production services using Java, Spring Boot, React, and MySQL.
- Optimized database access patterns and connection pooling, improving query performance by **35%**.
- Built CI/CD pipelines to automate builds and deployments, reducing release cycles.
- Wrote unit and integration tests to ensure correctness and long term maintainability.

Academic & Volunteer Experience

Graduate Researcher – Software Engineer (Volunteer) | University of Cincinnati — Apr 2024 – Apr 2025

- Contributed as a volunteer software engineer on an academic research project supporting data intensive systems.
- Built Spring Boot services for secure ingestion and processing of research datasets.
- Developed Kafka based pipelines to handle scalable event processing of approximately **10k events per day**.
- Integrated Redis caching to reduce database load and improve response times for internal tools.
- Used AI assisted tools to accelerate experimentation and improve developer productivity during research iterations.

Projects

E Wallet Distributed System | Java, Spring Boot, Kafka, Redis, Docker

- Designed a microservices based digital wallet system with emphasis on scalability and fault tolerance.
- Implemented asynchronous transaction processing using Kafka to support concurrent fund transfers.
- Implemented idempotent transaction handling to prevent duplicate processing under concurrent requests.
- Containerized services using Docker for consistent local and cloud deployments.

Social Media Platform | React, Node.js, MongoDB

- Built a full stack social media application with authentication, content feeds, and real time interactions.
- Designed REST APIs and optimized MongoDB schemas to support high read and write throughput.

ML Based Sentiment Analyzer | Python, NLP, Scikit learn

- Developed a machine learning pipeline for text classification using natural language processing techniques.
- Implemented data preprocessing, feature extraction, and model evaluation workflows.

Achievements

- Solved **1500+ algorithmic problems** on LeetCode, ranking in the **Top 4.37% globally**.
- Achieved a **maximum LeetCode contest rating of 1898**.
- Awarded third place at Virtusa Neural Hack S6 among over **1000 participants**.