VAMSI MAKKE

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SUMMARY

Highly accomplished and results-driven **Software Engineer** with a Master's in Information Technology, specializing in object-oriented design and the optimization of distributed systems. Demonstrated expertise in building resilient, scalable services and deploying them on AWS, with proficiency in Java, Python, and SQL. Skilled in developing RESTful APIs, optimizing complex queries, and creating production-grade automation tools using Docker and Kafka. Well-versed in CI/CD workflows, consistently delivering high-performance, reliable code that enhances system efficiency and supports large-scale applications. **Ranked in the top 7.5% on LeetCode** globally, with over 1,300 problems solved, showcasing exceptional algorithmic and problem-solving abilities.

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, C/C++
Cloud Platforms: AWS, GCP, Azure
DevOps &Tools: Docker, Kubernetes, Docker Swarm, GitHub Actions, Apache Kafka, Git/GitHub, Maven
System Design: Microservices, API Design, REST, Object Oriented Design, Distributed Systems
Databases: MySQL, PostgreSQL, MongoDB, Redis
Frameworks: Spring Boot, React.js, OAuth 2.0, Node.js, Express.js, Flask
Frontend: HTML, CSS, React.js, Tailwind CSS, Bootstrap
OS & Scripting: Linux, Bash

PROFESSIONAL EXPERIENCE

TORQ Sports, Woodland Hills, CA | Software Engineering Intern **June 2025 – Present**

- Designed and built a home feed algorithm from scratch using rank-based sorting, cursor pagination, and engagement signals, boosted user activity by 50%.
- Refined multi-tiered system performance by optimizing complex SQL queries, reducing query time by 55%.
- Implemented input validation and secure API authentication, lowering risk exposure by 65% and improving API protection.
- Reduced page load latency by 40% by optimizing API-to-database data flow and minimizing redundant calls.

NERDS, University of Cincinnati, Cincinnati, Ohio | Software Engineer Intern **Apr 2024 – Apr 2025**

- Built Spring Boot and Python Restful APIs to enhance secure data submissions, reducing data transfer time to SQL by 30%.
- Leveraged Kafka-based messaging and Redis caching to reduce API response times by 40%.
- Built and deployed scalable cloud services on AWS using EC2 and containerized workloads to support increased user demands and increased system availability by 70%.
- Automated provisioning pipelines using Docker and GitHub Actions reducing deployment time by 60%.

Cognizant Technology Solutions, Hyderabad, India | Software Engineer Intern **Dec 2022 – Dec 2023**

- Developed a full-stack web application (Spring Boot, React.js, MySQL), driving a 30% user engagement increase.
- Wrote complex SQL queries, optimized joins and indexing strategies to reduce query execution time by 35%.
- Created backend logic and Python-based admin tools for SQL performance improving monitoring efficiency by 45%.
- Participated in Agile sprints and contributed to code reviews, feature implementation, and production debugging.

EDUCATION

University of Cincinnati, Cincinnati, OH **Jan 2024 – May 2025**
Masters of Science in Information Technology GPA: 4.0/4.0
Relevant Coursework: Cloud & Storage Systems, Principles of Cybersecurity, Advanced Algorithms, Software Engineering.

Vasireddy Venkatadri Institute of Technology, Andhra Pradesh, India **Sep 2019 – Apr 2023**
Bachelor of Technology in Computer Science and Engineering
Relevant Coursework: Database Management System, Advanced Operating Systems, Distributed Systems, Linux

TECHNICAL PROJECTS

Social Media App

- Primarily built with MERN stack, used Python for analytics scripts and experimental API performance testing.

- Devised Python-based load testing scripts to simulate user traffic, monitor API throughput, and pinpoint latency under stress.
- Optimized API request handling, achieving a 40% reduction in response time.
- Established seamless data management with MongoDB, improving query efficiency by 35%

E-Wallet API

- Designed a microservices-based E-wallet using Spring Boot, Redis, Kafka, and MySQL for real-time fund transfers and improving system scalability by 40%.
- Engineered Python scripts for intelligent log parsing and scheduled background jobs to track transaction failures and detect anomalies.
- Refined application speed by 35% via Redis caching and increased scalability through microservice architecture.
- Boosted system scalability by implementing Kafka for efficient messaging, reducing latency by 30%.

User-Rental API

- Deployed a scalable backend for product rentals (Spring Boot, MySQL), reducing booking time by 20%.
- Crafted Python tools for continuous system health checks and automated conflict detection across booking schedules.
- Streamlined deployment setup with Docker Compose and GitHub Actions, reducing setup time by 50%.

AWARDS & ACHIEVEMENTS

VIRTUSA NEURAL HACK S6 WINNER-III

Secured Top-3 placement among 1,000+ participants in a national hackathon by collaborating with a cross-functional team.

LEETCODE (Top 7.5%)

Achieved a contest rating of 1800+ on LeetCode by solving 1,300+ problems, ranking in the top 7.5% globally.

LEADERSHIP EXPERIENCE

Captain of VVIT soccer team

Led the team to three consecutive finals, fostering a culture of strategic planning, team spirit, and teamwork.