VAMSI MAKKE

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SUMMARY

Software Engineer with **2.3 years** of internship experience developing full-stack web applications using Java, Python, JavaScript, and React.js. Skilled in building scalable backend services, integrating APIs, and deploying to cloud platforms using Docker and CI/CD pipelines. Strong grasp of data structures and algorithms, ranked in the **Top 7.5%** globally on LeetCode with 1300+ problems solved. Eager to contribute to high-impact projects in a fast-paced, collaborative environment.

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, C/C++
Cloud Platforms: GCP, AWS, Azure
DevOps &Tools: Docker, Apache Kafka, Apache Tomcat, Git/GitHub, Maven, Kubernetes, Docker Swarm, GitHub Actions
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 (Ubuntu), 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%.
- Refactored complex SQL queries (joins, indexing) to improve performance by 55% and enhanced backend efficiency for large datasets.
- Fixed security issues, lowering risk exposure by 65% and improving API protection.
- Reduced page load latency by optimizing API-to-database data flow and minimizing redundant calls.
- Built internal Python tooling for image validation, debugging, and runtime configuration checks in AWS.

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%.
- Collaborated with a cross-functional team to develop and test end-to-end features, integrating backend APIs with React.js frontend.
- 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.
- Automated provisioning pipelines using Docker and GitHub Actions.

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 monitoring.
- 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 scaling.
- 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 25%.

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.