VAMSI MAKKE

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript

Cloud Platforms: GCP, AWS(S3, EC2, Lambda), Kubernetes

System Design: Microservices, API Design, REST, Object Oriented Design

Databases: MySQL, Postgres, MongoDB, Redis **Frameworks:** Spring Boot, ReactJS, OAuth 2.0 **Frontend Tools:** HTML, CSS, Bootstrap, Tailwind CSS

Software Development Tools: Docker, Apache Kafka, Apache Tomcat, Git/GitHub, Maven

Testing: Junit, Mockito, Test Containers

Concepts: Data Structures & Algorithms (Solved over 1250+ LeetCode problems with contest rating of 1800+ - Top 7.5%)

PROFESSIONAL EXPERIENCE

NERDS, University of Cincinnati, Cincinnati, Ohio | Software Engineer Intern

Apr 2024- Apr 2025

- Built Spring Boot Restful APIs to enhance secure data submissions, reducing data transfer time to SQL by 30%.
- Leveraged Kafka for data streaming, focused on cutting delivery latency by 25% and optimizing scalability.
- Integrated Redis caching to reduce MySQL query load by 40%, boosting API response times.
- Strengthened data integrity via robust validation/sanitization, lowering error rates by 35%.

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.
- Enhanced data retrieval by 20% through optimized MySQL database solutions and resource management strategies.
- Elevated UX with a mobile-responsive design, decreasing bounce rates by 30%, and boosting average session durations.

EDUCATION

University of Cincinnati, Cincinnati, OH

Jan 2024 – May 2025

Masters of Science in Information Technology

GPA: 4.0/4.0

Relevant Coursework: Advanced Storage Systems, Principles of Cybersecurity, Advanced Algorithms, Software Engineering, Tech for Mobiles Apps.

Vasireddy Venkatadri Institute of Technology, Andhra Pradesh, India

Sep 2019 – Apr 2023

Bachelor of Technology in Computer Science and Computer Engineering

Relevant Coursework: Relational Database Management System, Advanced Operating Systems, Distributed Systems, Object Oriented Design, Algorithm Design, System Design, Computer Networks, Linux, Computer Architecture

PROJECTS

Social Media App

- Engineered a scalable full-stack application with posting, commenting, and user authentication features.
- Optimized API request handling, achieving a 40% reduction in response time.
- Integrated MongoDB for seamless data management, reducing query latency by 35%.
- Tech Stack: Node.js, Express.js, React.js, MongoDB

E-Wallet API

- Designed a microservices-based e-wallet (Spring Boot, Kafka, Redis, MySQL), boosting transaction speed by 40% with multithreading and caching.
- Refined application speed by 35% with Redis caching and increased system scalability through microservice architecture.
- Boosted system scalability by implementing the message queue Kafka for efficient messaging, reducing latency by 30% during peak usage.

User-Rental API

- Implemented a scalable backend for product rentals (Spring Boot, MySQL), reducing booking time by 15%.
- Streamlined deployment setup with Docker, reducing setup time by 25%.

ACHIEVEMENTS

VIRTUSA NEURAL HACK S6 WINNER-III

Collaborated with a cross-functional team to secure a top-three placement among 1,000+ participants in a competitive hackathon, achieving a 15% improvement in system efficiency.

LEETCODE (Top 7.5%)

Solved 1,250+ problems with contest rating of 1800+, showcasing proficiency in problem solving.

LEADERSHIP AND VOLUNTEER ACTIVITIES

Captain of college soccer team

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