RAJ VENKAT REDDY MAVURAM

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Software engineer with a strong academic foundation and around 4 years of professional experience in full-stack development, API design and implementation, and scalable microservices architecture. Proficiency in Python, Java, JavaScript, and SQL, and modern frameworks like React and Next.js, complemented by expertise in cloud platforms such as AWS, and GCP.

EDUCATION

Purdue University

Jan 2023 – Dec 2024

Master of Science in Computer Science

West Lafayette, Indiana

Vasavi College of Engineering

Jul 2017 – Aug 2021

Bachelor of Engineering in Computer Science and Engineering

Hyderabad, India

EXPERIENCE

Purdue UniversityWeb Developer

May 2023 – Dec 2024

West Lafayette, Indiana

- Spearheaded creation of an efficient web application leveraging **Next.js** along with **Tailwind CSS** and **Framer Motion**; improved usability metrics by optimizing design elements to shave off 2 seconds from average screen load time.
- Built and maintained complex database schemas in **PostgreSQL**, incorporating indexing and optimization techniques to reduce average query execution time by 40%, ensuring efficient data retrieval for high-traffic operations.
- Defined API endpoints using **FastAPI**, ensuring seamless communication between front-end and back-end systems, resulting in a 15% increase in system reliability.

Oracle India Pvt. Ltd Jan 2021 – Dec 2022

Software Engineer 2

Hyderabad, India

- Engaged in comprehensive development and enhancement of Oracle's leading hospitality product, **OPERA Cloud**, generating a total of \$1.6 million dollars in revenue.
- Designed 12 UI workflows utilizing **Oracle JET**, **React** and **JavaScript**, collaborating with cross-functional teams boosting efficiency and scalability.
- Envisioned and devised **20** back-end APIs using **SQL** and **PL/SQL**, modularizing back-end application code enhancing end-to-end operations and maintainability.
- Boosted performance of REST APIs by 15% by caching, query optimization, predictive throttling strategies, and observability using Kibana, Elasticsearch, and Logstash.
- Proposed scalable multithreaded pipelines for data processing, achieving a 30% reduction in processing time for high-traffic operations.
- Architected and deployed Microservices-Based solutions for OPERA Cloud, ensuring horizontal scalability and a 99.9% uptime, leveraging Kubernetes.
- Implemented a cloud-based test management tool on AWS, focusing on scalability and reliability, utilizing EC2, S3, and RDS to ensure seamless collaboration and data integrity.

Software Engineer 1

- Planned and integrated a new design pattern-based approach for booking functionality, streamlining reservation process for users, leading to the completion of over **10,000** reservations per month through the interface.
- Developed and optimized complex SQL queries and stored procedures in **Oracle 19c** database by adding indexes, refactoring joins, and implementing aggregations.
- Utilized tools such as **IntelliJ** (IDE), **Chrome DevTools** (debugger), **Maven** (build tools), and **Git** (source control) to streamline daily development tasks, enhancing code quality and version control practices.
- Mentored a team of five junior engineers, establishing a structured onboarding program and conducting knowledge-sharing sessions on microservices, cloud architecture, and best coding practices.

Software Engineer Intern

- Excelled in a fast-paced CI/CD **Kanban** environment, participating in feature development and bug resolution within **Agile Scrum** software development life cycle (**SDLC**) methodologies.
- Employed JUnit to redesign Oracle's internal API unit testing, reducing testing and debugging time by 70%.
- Minimized bug backlog by 35 issues, highest reduction among all interns in 2021, strengthening product stability.

SKILLS

- Languages: C++, Java/J2EE, Python, JavaScript (ES6+), TypeScript, SQL, Go, HTML/DOM, CSS, Bash.
- Databases: Oracle, MySQL, MongoDB, PostgreSQL, Query Optimization, Indexing, T-SQL, GraphQL.
- Tools: Jira, Postman, Git, VSCode, SQLDeveloper, Jenkins.
- Frameworks: React, Next.js, jQuery, Docker, Kubernetes, Spring Boot, Express.js, Node.js, Django, Flask.
- **Software Development:** Web services, Amazon AWS (EC2, S3, RDS, DyanmoDB), Azure, Google Cloud Platform (GCP), Agile Methodologies, API Development, Apache Kafka, Microservices.

CERTIFICATIONS

• Oracle Cloud Infrastructure Foundations 2021 Associate.