Yashwanth Reddy

yashwanth.vgf265@gmail.com Linkedin Profile

Experience

AL DATATECH **July 2024 – Present**

Software Engineer

- Successfully optimized **Node.js** and **Express** RESTful APIs to reduce latency by 20%, ensuring seamless performance under high traffic conditions. Additionally, deployed **Spring Boot** microservices with RESTful APIs, achieving a 40% reduction in API response times.
- Implemented **MongoDB** indexing and schema optimization, resulting in a 25% decrease in query execution time. Designed and deployed scalable NoSQL (MongoDB) and SQL (**PostgreSQL**) database solutions, boosting data retrieval performance by 35%.
- Leveraged **Docker** and **Kubernetes** to containerize microservices, enhancing scalability and slashing deployment times by 50%. Automated CI/CD pipelines using Docker, Kubernetes, **Jenkins**, and **AWS CodePipeline**, reducing deployment cycles from hours to minutes and system downtime by 30%.
- Integrated **AWS** services (**EC2**, **S3**, **RDS**, **Lambda**) to achieve 99.9% system uptime while optimizing cloud costs by 20%. This ensured high reliability and cost efficiency across cloud operations.

Cognizant **May 2021 – Aug 2022**

Software Engineer

- Designed and developed **Spring Boot/JPA** microservices, achieving 90% test coverage and improving system maintainability.
- Reduced API response times by 30% and improved system throughput through backend data caching and indexing.
- Implemented secure authentication using **OAuth 2.0** and **JWT**, and strengthened application security with encryption, ensuring compliance with security best practices.
- Leveraged **Apache Kafka** for event-driven architecture and real-time data streaming, increasing system resilience and responsiveness by 50%.
- Led a database migration to **PostgreSQL**, reducing query execution time by 20%, and designed efficient relational/NoSQL schemas, enhancing data processing speeds by 25%.

Projects

Fault-Tolerant Distributed Key-Value Storage | *Go, gRPC, Distributed Systems*

- Developed a distributed key-value storage system in Go, ensuring reliable data storage and retrieval across multiple nodes.
- Implemented the Raft Consensus algorithm for leader election and log replication, achieving fault tolerance and consistency in a five-node system.

Student Survey Application | *React, Node.js, Amazon RDS, CI/CD , GitHub, kubernetes, Amazon EC2*

- Constructed a single-page application for student surveys and integrated it into EC2 instances. Administered data using RDS services for database storage and management.
- Established a CI/CD pipeline with GitHub and Jenkins, automating build, testing, and deployment processes to streamline development workflows and decrease running time.

Personalized Movie Recommendation System | *Python, FastAPI, scikit-learn, MongoDB, Docker*

- Engineered a scalable movie recommendation engine using Python and scikit-learn, implementing a hybrid filtering approach that increased recommendation accuracy by 28% in user tests.
- Developed a responsive web application with Streamlit and FastAPI, integrating MongoDB for efficient data management, handling 500+ concurrent users during peak loads.

Technical Skills

Languages: C/C++, Python, Java, JavaScript, Go

Web development: HTML, CSS, Bootstrap, Tailwind CSS, React, Node.js, Express.js, GraphQL, RestApi, FastAPI

Database: MySQL, Oracle, PostgreSQL, MongoDB, Redis

Libraries: Pandas, Keras, NumPy, TensorFlow

Cloud and DevOps Technologies: Springboot, AWS (EC2, S3, RDS, DynamoDB, Lambda, SNS ,SQS, API Gateway, CloudWatch), Docker, Kubernetes, Jenkins, Apache Kafka, Git

Education

George Mason University, VA - Master in Computer Science - **GPA: 3.7/4.0** **Aug 2022 – May 2024**

Courses: Software Engineering for WWW, Software Testing, Design and Analysis of Algorithms, Database Systems, Data Mining, Deep Learning, Machine Learning, Big Data