Yeswanth Soma

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SKILLS

Languages: Java (8, 11, 17), JavaScript, Python, C/C++, SQL (MySQL, Oracle, PostgreSQL).

Frameworks & Libraries: Spring Boot (3.3+), Hibernate, JEE, MVC, JUnit (5), Spock, Swagger (OpenAPI 3.1), Angular, React, WebClient, RestTemplate.

Tools & Platforms: RESTful APIs, Microservices Architecture, CockroachDB (22.1+), Apache Kafka, Gradle, Maven, Jenkins, Ansible, Liquibase (4.15+), Bitbucket, GitHub, Lucidchart, Docker, Kubernetes (Rancher), Helm.

Cloud & DevOps: AWS (EC2, S3, CloudWatch, Redshift), Google Cloud Platform (GCP), CI/CD, Agile Methodologies, Infrastructure as Code (IaC), SonarQube.

Database Management: Database Design, Query Optimization, Data Extraction, Data Processing.

CERTIFICATIONS

- AWS Certified Developer – Associate, Amazon Web Services
- Career Essentials in Generative AI, Microsoft and LinkedIn
- MIT Certificate: Data Science and Machine Learning
- JPMorgan Chase & Co Software Engineering Virtual Experience Program

WORK HISTORY

Software Engineer , Google Cloud
Infrastructure Hyderabad, India   *5/2022– 1/2023*

- **Architected TPU System Software:** Improved and proposed the architecture for Tensor Processing Units (TPUs), resulting in a 50% improvement in system reliability and performance.
- **Investigated System Efficiency:** Optimized TPU system workflows and processes, leading to a 70% increase in operational efficiency and a significant reduction in system downtime.
- **Generated Diagnostic Tools:** Created automated diagnostic and performance evaluation tools that reduced issue resolution time by 40% and Analyzed server management capabilities.

Full Stack Developer , Channel Pro Communications
Hyderabad, India   *2/2019 – 5/2022*

- **Web Development:** Led the creation of interactive web applications using JavaScript (React, Angular), Node.js, and Python, focusing on user experience and functionality.
- **API Integration and Development:** Streamlined and Achieved RESTful APIs and integrated third-party services to enhance application capabilities and streamline data interactions, contributing to a 30% increase in system efficiency.
- **Designed and Defined** a robust data management system that streamlined data storage processes, reducing redundancy by 30%and improving overall application reliability for a user base of over 5,000 active users.
- **Led a project in partnership with Google** to deploy advanced machine learning algorithms, directly improving predictive analytics capabilities, with a resultant enhancement in decision-making speed that impacted over 500 daily users.
- **Project Impact and Client Service:** Delivered over 20 successful client projects, providing tailored solutions that met specific business needs and contributed to a 50% increase in client satisfaction and retention.

PROJECTS

Enhancing Low-Resource Machine Translation through Large Language Models: Google Research

- **Developed an innovative machine translation system** using Large Language Models (LLMs), achieving a 30% improvement in BLEU scores for low-resource languages compared to traditional Neural Machine Translation (NMT) methods.
- **Conducted a few-shot learning** approach with LLMs that reduced the need for parallel corpora by 90%, while maintaining an average translation accuracy of 85% for high-resource language pairs.
- **Designed and executed a comparative study** of NMT and LLM-based translation methods, demonstrating a 40% reduction in training time and a 25% increase in translation fluency for morphologically rich languages, as evaluated by native speakers.
- **In Progress:** Need to enhanced the workflow of the process with high definition process using GPT 4.0 and GPT 3.5 turbo.

AI-Driven Quantum Cloud Analytics Platform: D-Wave Systems

- **Advanced Data Processing:** Accelerated a platform integrating quantum computing and AI to analyze datasets up to 10x faster than traditional methods, handling over 1 petabyte of data for real-time insights.
- **Predictive Analytics:** Implemented predictive models that redesigned forecasting accuracy by 35%, enhancing decision-making in finance and supply chain.
- **Developed a comprehensive** cloud migration strategy that transitioned 10 legacy applications to AWS, resulting in an annual savings of $75,000 on infrastructure costs and Controlled scalability for all future deployments.
- **Optimization and Performance:** Utilized quantum algorithms to enhance optimization tasks, achieving up to a 60% reduction in computational time for complex scenarios, such as financial risk assessments and logistics planning.

RevOps Nexus Project : Loker Student Union, Inc

- **Launched a reusable library** using Java 17, Spring Boot 3.0, and CockroachDB to centralize revenue tracking, reducing manual intervention by 30% and improving financial visibility during critical financial reporting periods.
- **Deployed the library** on GitHub with CI/CD pipelines, automating updates and improving deployment efficiency by 25%, particularly during quarterly system audits.
- **Architected a microservice** using Spring Boot and Swagger to expose functionalities via RESTful APIs, streamlining AR processes for business and finance departments and improving activity tracking for the Games Room.
- **In progress:** Implementing Liquibase for database management and Spring Cloud for distributed settings, aiming to reduce downtime by 50% during system-wide updates.

EDUCATION

Masteter of Science : California State
University Dominguez Hills   *Jan 2024 - Dec 2024*

AWARDS AND ACHIEVEMENTS

Graduate Research Assistant at Loker Student Union   **California State Dominguez Hills,CA**

- **Conducted Research and Data Analysis:** Performed detailed data analysis and research to support student engagement initiatives and policy development, contributing to enhanced student services.

Esports Club Main Player   **California State Dominguez Hills, CA**

- Captured and streamed 30+ matches as the primary player, enhancing team visibility and engagement; generated a loyal online following of over 1,500 viewers, contributing to increased sponsorship opportunities.

MLH Hackathon : Ranked 3rd out of 15 from Anurag University.