Ramachandra Yerramsetti

Portfolio: https://rcyerramsetti.com/ Github: github.com/ramchandra3101 Email: rcyerramsetti@protonmail.com LinkedIn/Ramachandra Yerramsetti (959)-232-0757 | Hartford, CT

Summary

Full Stack Developer with 4+ years of experience in developing applications with JavaScript, Python, and Java. Skilled in building microservices, streaming APIs with Kafka, Native mobile apps, continuous integration with Jenkins and Github Actions.

Education

University of Connecticut

August 2023 - May 2025

Master of Engineering- Computer Science and Engineering; GPA: 3.8/4.00

Storrs, CT

Coursework: Algorithms & Complexity, Advanced Computer Networks, Natural Language Processing

K L University

August 2015 - May 2019

Bachelor of Engineering- Electrical Engineering; GPA: 9.0/10.00

Vijayawada, India

Coursework: Object-Oriented programming (Java), Computer Architecture, Discrete Mathematics

Professional Experience

Full Stack Developer

January 2024 - Present

UCONN Health | Python, Typescript(React Native), Django, AWS Lambda

Hartford, CT

- Developed a native mobile application, <u>StripLens</u>, achieving 90% accuracy in extracting data from Lateral Flow Test kits by implementing **REST APIS** in **Django** for image processing with open-source libraries, eliminating the need for commercial APIs.
- o Designed serverless image processing pipeline using React Native(iOS, Android) for real-time capture, FastAPI for high-performance data transmission, AWS (S3, Lambda) for secure storage and automated cleanup, optimizing storage costs by 80% by choosing storage class S3 One Zone Infrequent Access.
- Developed a Python automation script to call **C**# functions, reducing manual intervention by 80% and enabling smooth execution of 100+ daily PCR runs.
- Refactored Bio-Rad CFX Maestro software by modifying .NET Core-based DLLs and WCF service bindings, improved logging 40%.

Software Engineer May 2022 - July 2023

National railway company of Belgium(SNCB)| Java EE, Spring Boot, Apache Tomcat

Hyderabad, India

- Collaborated with a 5-member team to develop Excursion Ticket booking platform using **JAVA EE microservices**, with async processing and API rate limiting to handle traffic.
- Implemented user management and authentication using **JSON Web Token**, optimized session management with Redis cache, reduced session handling time by 40%, and improved user login efficiency.

Full Stack Developer

July 2019 - April 2022

Merck & Co.(Animal Health) | Java, Microservices, Azure, REST APIs, Grafana

Chennai, India

- Deployed and monitored 20+ Microservices on Azure, cutting downtime by 35% using proactive alerts from Azure Application Insights
- \circ Led the migration of a 2TB IBM DB2 database to **Azure SQL Managed Instance** using SSMA, achieving a 35% improvement in query performance while adhering strict schema conversion.
- Architected and implemented a component library for mypet.com using **ReactJS** with custom hooks, **context API**, and **TypeScript** interfaces, resulting in 40% code reusability across features.
- \circ Achieved 93% code coverage, 17% improvement over previous implementations while implementing jest unit tests and cypress E2E testing by employing Atomic design methodology

Academic Projects

Gen AI Finance Tracker | TypeScript(Next.JS,NodeJS), PostgreSQL, AWS Bedrock

- Developed T5-Base integrated agent-based full-stack financial analysis platform with advanced RAG implementation
- o Integrated Financial Modeling techniques for investment analysis with intuitive visualizations for complex data

Citi bike usage prediction at Manhattan-NYC \mid Python, LSTM, GRU

- Led development of hybrid RNN(LSTM+GRU) model for urban mobility forecasting, achieving 83% prediction accuracy
- Won First Prize in NSF competition by effectively analyzing and visualizing urban mobility patterns

Dog-Breed Detector | React Native, TensorFlow, Computer Vision

- Built full-stack mobile application with Django backend and React Native frontend
- Optimized model for mobile deployment, reducing inference time to 2s while maintaining high accuracy

Skills

Programming: Python, SQL, JavaScript, TypeScript, Java, Next.js, React, Node.js,

Databases: Oracle, PostgreSQL, MySQL, SQLite, MongoDB, Redis DevOps: CI/CD, Github Actions, Terraform, Jenkins, Apche Kafka

Certifications: AWS Certified Cloud Practitioner (2024)