# Ramachandra Yerramsetti

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### Summary

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

#### Skills

Programming: Python, Java, SQL, JavaScript, TypeScript.

Web Development: React(NextJs, Expo), NodeJS, Spring Boot, Django, FastAPI.

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

Certifications: AWS Certified Cloud Practitioner (2024)

#### Professional Experience

#### Full Stack Developer

January 2024 - Present

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

Hartford, CT

- Developed a native mobile application, achieving 90% accuracy in extracting data from image files by implementing **REST APIS** in **Django** for image processing with open-source libraries, eliminating the need for commercial APIs.
- 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.
- $\circ$  Developed a Python automation script to call  $\mathbb{C}\#$  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 unit testing using **Junit** and **Mockito**, enhancing code reliability and achieving a 30% reduction in bugs within 3 months, leading to smoother deployment cycles.
- o 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.
- Accelerated data retrieval speed achieving 40% faster API response times by designing and implementing **Redis** caching.

#### 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
- 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

- o 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

# ${\bf Dog\text{-}Breed\ Detector}\ |\ {\bf React\ Native,\ TensorFlow,\ Computer\ Vision}$

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

#### 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