Ramachandra Yerramsetti

Hartford, CT | rcyerramsetti@protonmail.com | (959)-232-0757 | Portfolio | LinkedIn/ramachandra-yerramsetti | GitHub Summary

Full Stack Engineer with 5+ years of experience developing scalable web applications and microservices using Java, Python, React, and Node.js. Strong track record in building secure systems, driving deployments, leading teams, and conducting code reviews.

Work Experience

Mobile Application Developer, UCONN Health - Farmington, CT

March 2024 - May 2025

- Developed a cloud Native application using **React Native**, **Node.js and AWS S3**, achieving 90%+ image classification accuracy for lateral flow strip (COVID detection).
- Engineered cost-effective image processing solution using open-source libraries, eliminating \$0.15 per-call API expenses while maintaining background removal and enhancement capabilities.
- Implemented automation scripts interfacing with Windows application APIs through .NET libraries, achieving 100% automation of laboratory workflows that previously required manual intervention.

Backend Software Engineer(Java), SNCB-NMBS – Saint-Gilles, Belgium

June 2022 - July 2023

- Collaborated with 15-member cross-functional team in developing the Employer Mobility Pack feature using **Spring MVC** and **Spring Security**. automating employee transport benefits and reducing HR processing time per request by 80%.
- Led a 5-member delivery team in deploying on **AWS** through **Jenkins CI/CD** pipelines, implementing Docker containerization for environment replication, and integrating **Grafana** monitoring for API performance.
- Integrated SAML SSO for 20,000+ users, streamlining secure access via enterprise IdPs and reducing manual setup across 15+ partner companies.
- Improved CI reliability by 30% by expanding **JUnit/Mockito** coverage and fixing flaky tests, leading to more stable deployments across multiple sprints.

Full stack Software Engineer, Merck & Co. - Rahway, NJ

June 2019 – May 2022

- Built Java servlets with REST API integration for real-time SAP HANA data access, improving frontend response time from 15s to 4s.
- Achieved 93% code coverage through **Jest** unit tests and **Cypress** E2E testing, Monitoring and mocking APIs with **Playwright**, exceeding previous implementation metrics by 17%.
- Implemented database connections between Java application servers and SAP HANA, optimizing data retrieval for high-performance reporting.

Skills

Languages & Frameworks: Java, Python, SQL, Typescript, Kotlin, React(NextJS), React Native, Redux, Django, Spring Boot, Spring MVC, Spring Security, Node.js, FastAPI

Database: NoSQL(MongoDB), MySQL, PostgreSQL, Redis, ElasticSearch, SAP HANA

Cloud & DevOps: Git, CI/CD (Jenkins, GitHub Actions), Kubernetes, Linux/Unix, AWS (Lambda, Fargate, ECS, API Gateway,

S3), GCP (BigOuery, Vertex AI), Jira

Certifications: AWS Cloud Practitioner (2024)

Projects

Agentic Expense Tracker

github.com/Expensetracker

- Engineered an AI-powered full-stack finance app using React, Node.js, and MCP server, integrating a chatbot, automated receipt scanning, and intelligent expense categorization through secure REST APIs for real-time insights.
- Technologies: Claude MCP, DataStax AstraDB (RAG), Node.js, NextJS, PostgreSQL, Jest, PyTest, OpenAI API

Cyberinfrastructure Competition Winner, Citibike Prediction Model

github/Cyberinfrastructure

- Developed Python ML models to predict Citibike demand across Manhattan using time, location, and demographic data, enabling smarter bike allocation and winning 1st prize for innovation and real-world impact.
- Technologies: Python, Scikit-learn, Pandas, GeoPandas, TensorFlow, ArcGIS

Education

University of Connecticut, MS in Computer Science (GPA: 3.8/4.0)

Sept 2023 - May 2025

• Coursework: Algorithms & Complexity, Cybersecurity, Natural Language Processing, Big Data Analytics

K L University, BS in Electrical Engineering (GPA: 3.9/4.0)

Sept 2015 - May 2019

• Coursework: Computer Architecture, Object-Oriented Programming, C & Data Structures