Ramachandra Yerramsetti in

Software Engineer
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SUMMARY

Software Engineer with 4+ years of experience designing and delivering backend services, database migrations, and cloud-based architectures on AWS. Strong in REST API development, PostgreSQL optimization, event-driven systems, Terraform-based IaC, and real-time notification pipelines.

EXPERIENCE

- **Software Engineer** — Hartford, CT
  Infosys Public Services(DOL-New Jersey) — June 2025 – Present
  - **NJ Wagehub**: Delivered 20+ full-stack features in 4 months by designing FastAPI based REST APIs, updating DTOs, and implementing PostgreSQL schema changes using Piccolo migrations in a team of 5, enabling faster rollout of contractor and payroll workflows across the NJ Prevailing Wage Hub.
  - **Notification System**: Implemented payroll and system alerts by building an AWS SNS with Lambda notification pipeline, ensuring contractors and public bodies receive timely updates and developers receive automated Slack alerts for production and development issues.
  - **UI Development**: Translated wireframe requirements into production-ready React components and integrated them with backend APIs.

- **Software Engineer** — Farmington, CT
  UCONN Health — June 2024 – May 2025
  - **Computer Vision**: Achieved 95% classification accuracy compared to manual lateral flow reader results by developing a serverless **Django** backend that processed captured strip images using custom PyTorch models on AWS Lambda.
  - **Open-Source Libraries**: Eliminated $12K/year in computational costs by building custom background removal and strip isolation APIs using open-source libraries such as OpenCV and CarveKit for LFT image analysis.
  - **Integration**: Interfaced with Bio-Rad's Windows-based PCR application by using **pythonnet** to call underlying .NET APIs from Python, enabling real-time two-way communication between the machine and backend service.

- **Full Stack Engineer** — Hyderabad, India
  TATA Consultancy services(Client: Belgium Train) — May 2022 – July 2023
  - **Microservices Architecture**: Developed Backend using **FastAPI** and **Python** to support user mobility features, integrating REST APIs and event-driven workflows to ensure platform responsiveness.
  - **Frontend Devlopment**: Created and maintained frontend components using **React** with strong test coverage via Jest and Cypress improving UI reliability by 25%.
  - **Documentation**: Documented RESTful APIs using **Swagger/OpenAPI**, improving onboarding time for new developers and integration

- **Full Stack Engineer** — Chennai, India
  Cognizant Technology Solutions(Client: Merck & Co) — June 2019 – Apr 2022
  - **Newsletter Subscription**: Contributed to a 5-member team to develop a cloud-native newsletter system using **Apache Kafka, and RabbitMQ**, integrating email APIs (Amazon SES) and deploying on AWS, enabling 5M+ personalized emails daily with 99.99% uptime and supporting A/B testing for subject line performance.
  - **Reusable Components**: Modernized Merck Animal health products page migrating the UI from CoffeeScript to **ReactJS** (JavaScript ES6) for modular programming, improving code reusability by 15%.

SKILLS

- **Programming Languages**: Typescript, Python, Java
- **Web Development**: React, NextJs, Vue.js, RESTful API, Node.js, Bun, CI/CD, Github Actions, RabbitMQ
- **Databases**: PostgreSQL, MongoDB, DynamoDB, Cassandra, Chroma

EDUCATION

- **University of Connecticut** — Storrs, CT
  Master of Engineering in Computer Science; GPA: 3.81 — Aug 2023 – May 2025