Rohith Kumar Naidu Movva

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Professional Summary

AI and Cloud Engineer | Full Stack Developer with experience delivering cloud-native applications and **Agentic AI** automation in banking operations at Commonwealth Bank of Australia (via Persistent Systems). Strong capability across AWS managed services, microservices, and LLM-enabled workflows (**multi-agent orchestration with LangGraph**, RAG, multimodal extraction) to automate document-heavy processes and improve operational throughput, accuracy, and turnaround time.

Key Highlights

- Built a cloud-native payment processing service scaling to **10,000+ daily transactions** with **99.9% availability**.
- Designed an **Agentic AI** document pipeline using LangGraph multi-agent orchestration, reducing processing time from **15 minutes to 2 minutes** per case (87% improvement).
- Delivered LLM-assisted validation and human-in-the-loop routing, reducing manual data entry by **70%**.
- Production delivery in regulated banking environments, integrating with internal APIs and downstream platforms (Pega).

Technical Skills

AI & LLMs: LangGraph, LangChain, RAG, vector search, prompt engineering, Langfuse (observability), GPT-4V (multimodal)

AWS: ECS Fargate, Lambda, SQS, ALB, S3, Aurora, VPC, CloudWatch, EC2

Backend: Python (FastAPI), Node.js (Express), REST APIs, microservices, SQL

Frontend: React, TypeScript, JavaScript, Tailwind CSS, responsive UI

Data: PostgreSQL, AWS Aurora, MongoDB Atlas

DevOps & Tools: GitHub Actions (CI/CD), Docker, Git, Postman, JIRA, Agile/Scrum

ML & Data Science: TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, OpenCV, spaCy, NLTK

Professional Experience

Commonwealth Bank of Australia *(via Persistent Systems)*

AI Engineer & Full Stack Developer | Sydney, Australia | Apr 2025 – Present

Cloud-Native Payment Issuer *(Payments)*

- Designed and delivered a cloud-native, serverless-first payment processing service using ECS Fargate, Lambda, SQS, ALB, and Aurora, processing 10,000+ transactions per day with 99.9% availability.
- Built REST APIs for ingestion and validation of Home Loan Closure payloads, enforcing schema validation and business rules prior to persistence.
- Implemented status synchronisation endpoints (PATCH) to maintain near real-time consistency between the payment engine and downstream ledger systems.
- Established CI/CD using GitHub Actions for application delivery and infrastructure provisioning (IaC).

Intelligent Document Capture *(Agentic AI with LangGraph)*

- Architected a LangGraph multi-agent workflow to classify, extract, and validate documents across multiple formats, reducing processing time from 15 minutes to 2 minutes per case.

- Implemented a multimodal classification and extraction agent (GPT-4V) generating structured JSON outputs with 94% extraction accuracy.
- Built tool-using agents to query internal banking APIs for ground-truth data and a validation agent to compute field confidence and drive human-in-the-loop routing, reducing manual workload by 70%.
- Delivered FastAPI services with PostgreSQL state management and Langfuse observability for prompt tracing and performance monitoring.

Mortgage Discharge Email Automation *(AI-Powered Triage)*

- Developed an email triage pipeline using Microsoft Graph API to classify 500+ daily discharge requests and automate case creation in Pega.
- Implemented intent classification (full/partial discharge, consents, substitutions) and customer matching logic using address and account signals.
- Produced a strict JSON handoff schema to trigger downstream case APIs, reducing manual triage workload by 60%.

Green Light Worldwide *(Contract)*

Network & IT Support Engineer | Sydney, Australia | Feb 2025 – Apr 2025

- Managed hardware and software asset lifecycle for SAP's ANZ operations, ensuring seamless device provisioning.
- Configured Cisco routers and servers onsite, establishing secure connections between physical infrastructure and cloud environments.
- Conducted rack-and-stack operations and network troubleshooting to ensure high-availability server performance.

ACS Professional Year Program | Sydney, Australia | Jan 2024 – Feb 2025

Tiered-Access Generative AI Project

- Developed a subscription-based AI chat platform with Role-Based Access Control (RBAC) to dynamically govern LLM response depth and token usage based on user tiers (Gold/Silver/Platinum).
- Implemented ephemeral local session storage to maintain conversational context during active sessions while ensuring strict data privacy and security upon logout.
- Secured API architecture using JSON Web Tokens (JWT) for stateless authentication and Bcrypt for password hashing.

Australian Workplace Integration

- Refined technical communication strategies, focusing on stakeholder engagement, requirements gathering, and translating complex technical concepts for non-technical audiences.
- Applied Australian industry standards, including the ACS Code of Ethics, WHS regulations, and privacy compliance laws, to software development lifecycles.
- Demonstrated effective cross-functional collaboration and agile team dynamics within a simulated Australian corporate environment.

Cognizant

AI Engineer & Full Stack Developer | Hyderabad, India | Apr 2021 – Dec 2021

- Designed and developed a microservices-based AI-driven support portal with role-based authentication (JWT) and tiered response logic.
- Built RESTful APIs using Node.js and Express.js, integrating with MongoDB Atlas for data storage; developed responsive frontend using React.js and Tailwind CSS.

- Deployed application on AWS (EC2, S3), implementing CI/CD practices with Git for version control.
- Developed ML models using TensorFlow, PyTorch, and Scikit-learn for predictive analytics; built NLP pipelines for sentiment analysis using spaCy and NLTK.

Personal Projects

Full Stack E-Commerce Platforms (Organic Mart & CycleHub)

- Built two production-ready MERN stack applications with automated CI/CD (Render, Vercel), admin dashboards for inventory management, and PayPal API integration.
- Live: agrotecharvest.com | ambika-bike-alley.vercel.app

Custom Transformer Architecture & Computer Vision

- Engineered a Transformer model (Encoder-Decoder) from scratch, implementing forward/backward propagation and weight optimisation.
- Built image processing pipelines using OpenCV for noise reduction, thresholding, and grayscale conversion.

Education

Master of Computer Science | University of Wollongong | 2022 – 2023

Majors: Machine Learning, Big Data Analytics, Software Engineering

Bachelor of Electronic and Communication Engineering | Aurora Engineering College | 2016 – 2020

Certifications

- AWS Certified Machine Learning - Specialty
- Pega 8.8 CSA Certified

Working Rights

485 Post-Study Work Visa - Full-time working rights without restrictions.