



PROFILE SUMMARY

- **Staff Platform Engineer & Solutions Architect with nearly 16 years of experience** architecting and delivering enterprise-grade full-stack, cloud-native, data, and AI platforms, **including 5+ years of production Generative AI implementation.**
- **Spearheaded Agentic AI, Multi-Agent, RAG, and LLM architectures** leveraging AWS Bedrock, LangGraph, LangChain, OpenAI, Claude, and hybrid search, translating complex enterprise challenges into scalable intelligent solutions.
- **Engineered large-scale data ecosystems using Python, Spark, Airflow, Kafka, AWS Glue, and Athena**, processing cloud events daily across multiple AWS accounts to power analytics, automation, and AI-driven decision intelligence.
- **Recognized for end-to-end architecture ownership, customer-embedded engineering**, executive stakeholder engagement, and reusable AI/cloud accelerators, consistently bridging business strategy, technology architecture, and production execution across complex enterprise environments.



CORE COMPETENCIES

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| • Generative AI & Agentic AI Architecture | • AI Productionization, LLMops & Evaluation |
| • Agentic AI, Multi-Agent & RAG Systems | • Security, Governance & AI Observability |
| • Enterprise AI & Data Platform Architecture | • Intelligent Automation & Agent Workflow Architecture |
| • AWS Cloud & Distributed Systems Architecture | • Microservices, Event-Driven & API Architecture |



IT SKILLS

- **AI / Generative AI:** Agentic AI & Multi-Agent Systems, RAG & Hybrid Search, LLM Application Architecture, LangGraph, LangChain, LangSmith, LlamaIndex, Amazon Bedrock, OpenAI SDK, Anthropic Claude, Azure OpenAI, Prompt Engineering, Structured Outputs, Tool/Function Calling, Embeddings, RAGAS, LLM Evaluation & LLMops
- **AI Platform & Agent Architecture:** Agent Runtime & Orchestration, Tool Integration, Context Engineering, Memory Patterns, Guardrails, Workflow Orchestration, AI Automation, Intelligent Workflows, Agent Evaluation, AI Observability, Model/Prompt Optimization
- **Cloud & Platform Architecture:** AWS, Lambda, ECS, EKS, S3, DynamoDB, RDS, API Gateway, Cognito, IAM, Step Functions, Bedrock, Terraform, CloudFormation, Docker, Kubernetes, CI/CD
- **Data Engineering & Big Data:** Python, SQL, PySpark, Apache Spark, Apache Airflow, Kafka, AWS Glue, EMR, Athena, Batch & Streaming Architecture, Data Lake Architecture, Data Governance & Cataloging
- **Application & Integration Architecture:** TypeScript, JavaScript, Node.js, React, FastAPI, REST/GraphQL APIs, Microservices, Event-Driven Architecture, API Integration, Distributed Systems
- **Search & Knowledge Engineering:** OpenSearch, Pinecone, ChromaDB, FAISS, Vector Search, Hybrid Search, Embedding Engineering, Knowledge Retrieval
- **Leadership & Delivery:** Solution Architecture, Architecture Governance, Technical Strategy, Customer-Embedded Engineering, Executive Stakeholder Management, Presales & Solution Envisioning, Reusable Accelerators, Cross-Functional Technical Leadership



KEY HIGHLIGHTS

- Architected enterprise-grade GenAI, Agentic AI, RAG and multi-agent platforms across intelligent assistants, document intelligence, data visualization and enterprise knowledge workflows, delivering 75% lower manual effort and 40% faster turnaround.
- Designed production-ready AI platforms across data ingestion, retrieval, model integration, agent orchestration, APIs, evaluation, observability and operational governance across AWS and Azure.
- Architected enterprise-scale data and operational platforms process 15M+ cloud events daily across 1,700+ AWS accounts while integrating Spark, Airflow, Kafka, Glue, EMR, Athena and GenAI services.
- Established LLMops/MLOps, evaluation, monitoring and reliability patterns contributing to 99.9% availability, 30% MTTR reduction, and 20% lower cloud infrastructure costs.
- Built reusable architecture patterns and AI/cloud accelerators spanning agent orchestration, workflow automation, model integration and infrastructure-as-code, reducing new AI use-case build effort by ~35%.



WORK EXPERIENCE

Since Jun'25: Commonwealth Bank of Australia (CBA) India, Bengaluru as Staff Platform Engineer - Cloud & Gen AI

Key Result Areas:

- Architected an AI-powered operational intelligence platform on AWS, spanning data ingestion, transformation, orchestration, model integration, backend services and UX-automating 10+ enterprise workflows and reducing manual investigation effort by ~40%.
- Designed large-scale telemetry and data-processing architecture using Apache Spark and Airflow, processing 15M+ CloudTrail and AWS Config events daily across 1,700+ AWS accounts, enabling enterprise-wide analytics, contextual reasoning and AI-assisted operational decision-making.
- Designed AI-assisted incident investigation and runbook orchestration capabilities, combining infrastructure telemetry, GenAI reasoning and workflow automation to reduce MTTR by 30% and improve troubleshooting consistency by 50%.

- Established reusable AI platform patterns and reference architectures incorporating Temporal Workflow-as-Code, Terraform and CloudFormation, reducing new AI use-case development effort by ~35% and accelerating repeatable enterprise adoption.
- Drove iterative production optimization across Platform Engineering, SRE, Product & executive stakeholders, improving AI recommendation accuracy by ~25% across successive releases while aligning architecture with reliability, scalability and operational requirements.
- Bridged AI engineering, cloud platform and application architecture, translating operational problems into production-ready solutions while balancing accuracy, latency, reliability, security, cost and developer experience.

May'22 – Jun'25: Capgemini Engineering, Bengaluru as Data & AI Engineer | GenAI Solution Architecture & Customer-Embedded Delivery

Key Result Areas:

- Led enterprise discovery and solution architecture with engineering teams, business stakeholders and C-suite sponsors, translating ambiguous business problems into production-grade AI, data and full-stack solutions that reduced manual effort by 75% and accelerated decision-making by 40%.
- Architected end-to-end AI applications spanning Python/FastAPI services, TypeScript/React applications, Spark data pipelines, curated data layers, APIs and deployment infrastructure, taking solutions from discovery through production and user adoption.
- Designed and productionized Agentic RAG architectures using LangGraph, integrating multi-step reasoning, semantic retrieval, tool orchestration and contextual grounding, improving answer accuracy by 30% and reducing user resolution time by 45%.
- Productized reusable LLM application patterns using LangChain, LangGraph, LangSmith and Amazon Bedrock, accelerating feature delivery by 50% across 8+ enterprise use cases.
- Established GenAI evaluation and reliability practices using LangSmith and RAGAS, combining prompt optimization, structured outputs and function calling to improve response consistency by 35%, reduce hallucinations by 25%, and cut manual validation effort by 60%.
- Architected enterprise tool and API integration patterns, connecting 15+ business APIs and enterprise systems to AI agents to enable autonomous workflow execution and eliminate ~50% of repetitive manual activity.
- Partnered with engineering leadership, product teams and client stakeholders on solution envisioning, architecture decisions and GenAI capability building, contributing to reusable accelerators and client proposals.

Jan'11 – May'22: Tata Consultancy Services (TCS), Chennai

Key Result Areas:

Data Science Practitioner | Tata Consultancy Services (TCS) | Mar 2020 – May 2022 | Kolkata, India

- Delivered production-grade ML/DL solutions across predictive analytics, NLP, anomaly detection & computer vision, including a CNN-based corrosion/damage detection solution that reduced manual inspection effort by 70% & generated approximately AUD 750K in annual savings.
- Performed large-scale EDA across millions of application logs and automated KPI intelligence dashboards, driving 20% higher user engagement, 15% faster load times, and 60% less manual reporting.

Cloud Applications Solutions Architect | Tata Consultancy Services (TCS) | Jun 2018 – May 2022 | Kolkata, India

- Architected secure, scalable AWS cloud-native applications using Node.js/TypeScript, Cognito, IAM, S3, SES, SNS, Lambda, and DynamoDB Streams, aligning architecture with enterprise NFRs.
- Modernized API ecosystems using AWS Lambda & API Gateway, delivering 40% faster API response times & 30% lower infrastructure costs.
- Industrialized CI/CD with AWS CodeBuild & CodePipeline, reducing deployment cycles by 70% & accelerating automated defect detection.

Cloud Applications Developer | Tata Consultancy Services (TCS) | May 2016 – May 2018 | Kolkata, India

- Engineered 5+ cloud-native full-stack applications on AWS serverless architecture using Node.js/TypeScript, reducing infrastructure overhead by 30% and accelerating release cycles by 40%.
- Orchestrated cross-functional delivery across Product, QA, Infrastructure, improving requirement traceability & reducing delivery gaps by 25%.

Onsite Project Coordinator – Client-Facing | Tata Consultancy Services (TCS) | May 2015 – May 2016 | London, UK

- Led onsite technical delivery and cross-functional coordination for a UK enterprise client, improving execution efficiency by 30%.
- Facilitated 20+ stakeholder workshops and institutionalized decision governance, reducing communication gaps by 40% and achieving 100% on-time delivery.

Application Developer & Team Lead | Tata Consultancy Services (TCS) | Jan 2011 – Apr 2015 | Chennai, India

- Engineered banking application modules and API integrations with legacy core systems, reducing deployment timelines by 35% while sustaining 99.5% application availability.
- Led and mentored a 6-member engineering team across the SDLC, strengthening engineering quality and maintaining zero production-critical incidents for 18 months.

EDUCATION

- 2024:** Advanced Certificate Program, Generative AI from UpGrad
- 2022:** M.Tech. (Data Science & Engineering) from Birla Institute of Technology & Science (BITS), Pilani, India
- 2010:** B.E. (Computer Science & Engineering) from Visvesvaraya Technological University (VTU), Bengaluru, India

CERTIFICATIONS

- AWS Certified Generative AI Developer - Professional (Early Adopter) | 2026
- HashiCorp Certified: Terraform Associate (004) | 2026
- AWS Certified Machine Learning – Specialty | 2026
- AWS Certified Machine Learning Engineer – Associate | 2026
- AWS Certified AI Practitioner | 2025
- AWS Certified Solutions Architect – Associate | 2020