

■ EXECUTIVE SUMMARY

GenAI & Machine Learning Architect with **8+ years of experience** designing, building, and deploying enterprise AI/ML solutions across the full lifecycle—from **problem definition and solution architecture** to production deployment, governance, and adoption. At Citi, builds **LLM, RAG, agentic AI, multi-agent, and automated decision-making systems** that surface compliance risk and prevent financial leakage within a highly regulated BFSI environment. Works closely with business, engineering, risk, and compliance stakeholders to translate complex business problems into **scalable, reliable, and governed AI solutions**.

■ CORE EXPERTISE

- Generative AI & LLMs
- RAG & Vector Search
- Production AI Systems
- Cloud & MLOps
- Agentic AI & Multi-Agent Systems
- AI/ML Solution Architecture
- AI Governance & Risk
- Business-to-AI Translation

■ WORK EXPERIENCE

Assistant Vice President, GenAI · Citi

Oct 2023 – Present | Bangalore, IN

AI-Powered Regulatory Intelligence

Designed and developed **production-grade GenAI solutions** that automate the interpretation of regulatory and financial documents, identify compliance scenarios, and translate complex requirements into **structured, machine-actionable controls**. Applied **LLMs, RAG, vector search, multi-agent architectures**, and cloud AI services to support enterprise regulatory monitoring and decision workflows.

- Architected an **AI-assisted regulatory intelligence workflow** to reduce manual document analysis and control-identification effort.
- Improved **consistency, scalability, traceability, and repeatability** across compliance workflows.
- Enabled scalable AI-assisted regulatory monitoring across **enterprise data pipelines**.

AI-Powered Credit Risk Compliance Validation

Designed and developed a production-grade **LLM-based compliance validation system** to assess consistency between credit decision logic and customer-facing communications.

- Applied **LLM-based reasoning** to compare decision logic with communication content and surface potential inconsistencies.
- Automated a previously manual **compliance validation workflow**, improving review scalability and efficiency.
- Partnered with **business, engineering, risk, and compliance** teams to translate requirements into governed AI workflows.

Data Science Manager · Philips Healthcare

Apr 2022 – Sep 2023 | Bangalore, IN

- Developed a Bayesian **Marketing Mix Modeling (MMM)** solution using PyStan, based on Google's Bayesian MMM research framework, to quantify incremental marketing-channel impact, adstock, and diminishing returns for data-driven budget allocation.
- Delivered quarterly investment recommendations that improved marketing efficiency and generated approximately **\$5 million in annual cost savings**.
- Built a healthcare **churn prediction** solution using CT and MR service data with feature selection, target encoding, AutoML, XGBoost, and L1 Logistic Regression to identify high-risk customers and support targeted retention.

Data Scientist II · Ambee (Datair Technology)

Aug 2019 – Apr 2022 | Bangalore, IN

- Developed end-to-end **data preprocessing and prediction pipelines on AWS** for an air quality product using XGBoost and IDW interpolation to enhance spatial and temporal resolution.
- Implemented an **ARIMA time-series forecasting** model and deployed it on IoT stations for proactive air-quality monitoring.
- Designed an environmental history data pipeline using **AWS Glue, EC2, Lambda, and ECS** to generate historical insights for research and decision-making.
- Built and deployed ML models including **XGBoost, k-NN, AutoML, and LSTM**, and implemented MLOps using **AWS SageMaker** for training, deployment, and monitoring.

■ WORK EXPERIENCE (continued)

Data Scientist · Upyourgame

Aug 2018 – Jul 2019 | Bangalore, IN

- **Employee Performance Prediction:** Developed an XGBoost-based solution for team formation and resource allocation.
- **Attrition Prediction:** Built a logistic regression pipeline supporting employee management and retention strategies.
- **AutoML Pipeline:** Established automated retraining and continuous improvement workflows, reducing retraining time by **90%**.

■ PERSONAL AI PROJECTS

Agentic Customer Support AI GENAI · RAG · AGENTS

Built a multi-stage **agentic AI customer-support system** using LLM-assisted intent and issue classification, risk-aware routing, RAG, backend APIs, and human-in-the-loop escalation. Designed to automate low-risk customer queries while routing higher-risk cases to human experts. [GitHub ↗](#)

LoRA Fine-Tuned GPT-2 on Shakespeare LLM · PEFT · PYTORCH

Built a modular **parameter-efficient fine-tuning** pipeline for GPT-2 using LoRA and Hugging Face PEFT on the Shakespeare dataset. Implemented training and inference workflows and demonstrated practical LLM fine-tuning and text-generation capabilities. [GitHub ↗](#)

■ TECHNICAL SKILLS

GenAI & LLM

LLMs, Generative AI, RAG, PEFT, LoRA fine-tuning, PyTorch, NLP, text analytics, agentic AI, multi-agent systems.

Cloud & MLOps

AWS SageMaker, AWS Glue, AWS S3, AWS Fargate, AWS EC2, AWS SQS, Kafka, Azure Databricks, MLOps, model monitoring.

Developer Tools

GitHub, Bitbucket, Docker, Plotly, spaCy, NLTK, Power BI, Excel, Driverless AI.

Data & Engineering

Python, R, JavaScript, SQL, NoSQL, MongoDB, MySQL, PySpark, ETL pipelines, data analysis.

ML & Modeling

XGBoost, Logistic Regression, Linear Regression, LSTM, ARIMA, k-NN, AutoML, scikit-learn, pandas, NumPy, BERT, SHAP, MMM.

■ EDUCATION

Bharati Vidyapeeth University, Pune

2017 – 2019 · MCA — Advanced Analytics Specialization

Rani Channamma University, Belgaum

2013 – 2016 · Bachelor of Computer Application (BCA)

■ FOCUS AREAS

Enterprise AI · Regulated BFSI · GenAI Product Engineering · AI Architecture · ML / MLOps · Applied Research

■ ACHIEVEMENTS

Pune Smart City Hackathon

Pioneered development of a product that contributed to sales, revenue, and business growth for Datar Technology, supporting partnerships with Launchpad, Airbus, and Bosch.

Google Launchpad

Presented the Environmental Intelligence solution and ranked among the **top 5 startups** in the program.

NASA Space Apps Challenge

Mentored participants as part of the DERBI program.

Startup Mentorship

Provided mentorship on Driverless AI to emerging startups during the 2019 NUMA program.

■ PROFESSIONAL PRESENCE

AI/ML writing: technical articles covering RAG, retrieval evaluation, hybrid search, query expansion, long-context behavior, and practical AI engineering. [View Articles ↗](#)

Project descriptions are intentionally presented at a high level and omit confidential, proprietary, client-specific, and internal information.