

Jacob Jerry Arackal

AI Engineer

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[Portfolio](#) | [GitHub](#) | [LinkedIn](#) | [Dev.to](#)

Summary

AI Engineer focused on building production-ready GenAI systems, RAG pipelines, AI agents, and MLOps workflows. Specialized in LLMops, Agentic AI, Machine Learning, and Full-Stack Development. Passionate about shipping reliable AI systems and sharing technical learnings through engineering content.

Professional Experience

Techfriar Technologies

AI-Native Full-Stack Engineer | May 2024 – Mar 2025

- Architected and deployed RAG pipelines and LLM agents using Gemini, OpenAI, and Llama models.
- Built AI workflow automation systems using LangChain and Agentic AI patterns.
- Developed scalable full-stack applications using React, Next.js, GraphQL, PostgreSQL, and Python.
- Containerized applications using Docker, ensuring consistent development and production environments.
- Optimized backend systems and database performance for enterprise applications.

Microsoft

AI/ML Engineer Intern | Jan 2022 – May 2022

- Built an automobile price prediction model using Python and machine learning techniques.
- Leveraged Azure ML services for experimentation and deployment.
- Performed feature engineering, model evaluation, and hyperparameter tuning.

Key Projects

MendCI | AI-Powered Self-Healing CI/CD Assistant

- Diagnoses CI/CD failures and prepares remediation patches through MCP tooling.
- Implemented human-in-the-loop approval workflows for safe automated fixes.

Ad Click Prediction MLOps

- Built an enterprise-grade ML pipeline using ZenML, MLflow, Evidently, XGBoost, and FastAPI.
- Automated training, monitoring, validation, and deployment workflows.

Credit Card Fraud Detection

- Developed an end-to-end fraud detection pipeline with ZenML and MLflow.
- Implemented batch inference and interactive Streamlit dashboards.

ProCoder

- Built a RAG-powered coding assistant using LangChain, Ollama, Code Llama, and Gradio.
- Provided contextual code generation and debugging support.

Technical Skills

- GenAI & Agentic AI: LangChain, LangGraph, RAG, AI Agents, Multi-Agent Systems, MCP, LLMops, Prompt Engineering
- Machine Learning: Scikit-Learn, XGBoost, Random Forest, Logistic Regression, Feature Engineering, Model Evaluation
- MLOps & Cloud: MLflow, Docker, GitHub Actions, CI/CD, FastAPI, Model Serving, Experiment Tracking
- Programming: Python, JavaScript, TypeScript, SQL, Node.js
- Databases: PostgreSQL, MongoDB, Pinecone, ChromaDB, SQLite, FAISS
- Frontend: React.js, Next.js, HTML, CSS

Education

Bachelor of Technology (Information Technology) | Amal Jyothi College of Engineering |
2019 – 2023

Certifications

Oracle Cloud Infrastructure 2025 Generative AI Professional

Writing & Open Work

Publishing AI Engineering, RAG, Agentic AI, and MLOps content on Dev.to and LinkedIn.