

EDUCATION

- Asansol Engineering College, B.Tech in Computer Science and Engineering
- CGPA: 9.08
- (2020–2024)

EXPERIENCE

- EY (Ernst & Young), Kolkata

AI Engineer

Sep 2024 – Present

Architected and deployed a governed internal **multimodal Knowledge Retrieval Agent** on Azure AI Foundry, Azure OpenAI, and Azure AI Search, enabling role-aware answers from approved sources and reducing dependence on manual document discovery.

Designed production retrieval foundations with **Dataverse, Cosmos DB, and hybrid vector search**, improving answer freshness and traceability through incremental synchronization, access controls, and audit-ready observability.

Built **multi-agent automation workflows** that transform requirements into grounded, review-ready test cases, standardizing quality gates and reducing the manual effort required before human validation.

Developed AI-agent **governance and FinOps capabilities** that provide operational visibility into system usage, cost, and health signals through schema-constrained, real-time recommendations.

Partnered with cross-functional teams to convert ambiguous needs into secure, production-ready **FastAPI, Azure Functions, Power Platform, and .NET** solutions, improving delivery confidence with managed identity, Key Vault, telemetry, CI/CD, and containerized deployments.

Tech: Microsoft Azure, Azure AI Foundry, Azure OpenAI, Azure AI Search, Semantic Kernel, MCP, FastAPI, RESTful APIs, Python, .NET, Fine-tuning, Evaluations, Guardrails
- SMIIT LTD, Remote

Software Development Engineer Intern

Dec 2023 – Jul 2024

Engineered **ML-driven threat-detection pipelines** that transform streaming security telemetry into real-time, prioritized risk signals for a cybersecurity platform, improving the speed and consistency of security-event triage across enterprise environments.

Built scalable **feature-engineering, preprocessing, and model-inference workflows** for high-volume security logs; iterated on detection quality to reduce false positives and make alerts more actionable.

PROJECTS

- HealthAI Agent Lab

Safety-first health-screening research system using open-weight language and voice models, locally trained and versioned ONNX specialist models, deterministic controls, and safety-aware escalation boundaries.

View Code

Live View

Tech: Python, FastAPI, Qwen3, llama.cpp, Moonshine, ONNX, AWS SAM, Lambda
- OpsWeave: Enterprise Workflow Compiler

Multimodal workflow agent that interprets scattered process materials—PDFs, images, audio, video, spreadsheets, and API specifications—and compiles them into structured, reviewable workflows with typed validation, traceability, human approvals, and inspectable execution traces.

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Live View

Tech: Next.js, FastAPI, Amazon Bedrock, Step Functions, Lambda, DynamoDB, Terraform
- VerdaTrace

AI-native environmental evidence workspace for source-cited obligations, amendment resolution, spatial review, and human-approved reports; includes revision graphs, satellite imagery, GeoJSON/KML boundary validation, nine-class land-cover analysis, and confidence/provenance signals for defensible environmental decisions.

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Tech: Next.js, React, TypeScript, Node.js, MapLibre, Google Earth Engine, Google Cloud, GeoJSON, KML, Vitest

TECHNICAL SKILLS

- Languages: Python, C++, Java, JavaScript, TypeScript, C#
- Agentic AI & LLM Systems: Agentic RAG, Multi-agent orchestration, Tool calling, LangGraph, MCP, Semantic Kernel, Vector Databases, Prompt engineering, Fine-tuning, Evaluations, Guardrails
- AI / ML: Azure AI Foundry, Azure OpenAI, Amazon Bedrock, Hugging Face, Transformers, PyTorch, ONNX, Scikit-learn, Feature Engineering, Model Evaluation, Pandas, NumPy
- Platform & Cloud: System design, FastAPI, RESTful APIs, Node.js, .NET, Microsoft Azure, AWS, Docker, Terraform, Kubernetes, Observability, CI/CD
- Frontend & Tools: ReactJS, Next.js, TypeScript, HTML, CSS, Git, GitHub, PostgreSQL, DynamoDB, Azure Cosmos DB

CERTIFICATIONS

- Microsoft Azure AI Engineer Associate (AI-102)

Verify

 Microsoft Azure AI Fundamentals (AI-900)

Verify
- GitHub Copilot (GH-300)

Verify

 Google Cloud Platform Business Professional Accreditation

Verify

ACHIEVEMENTS

- CSI State Level Project Exhibition Winner

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 Samsung Solve for Tomorrow India — Finalist

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- Trending #1 Developer Globally on GitHub

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 Led and mentored 4,000+ students nationwide through the Google Cloud Ready Facilitator Program

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