

DIPTARAJ SINHA

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PROFESSIONAL SUMMARY

Final-year CSE student building production-facing LLM features and cloud infrastructure. Built React + LLM chatbots and hardened AWS workflows — focused on reliable inference and cost control. Seeking AI Engineer / Full-Stack role to ship scalable model-driven products.

TECHNICAL SKILLS

- Languages: Python, Java, JavaScript, C++, C
- Frontend: React, HTML, CSS
- Backend: SQL, MySQL, FastAPI, REST APIs
- Cloud: AWS (EC2, S3, Lambda, IAM), Docker (basic)
- ML/AI: Prompt Engineering, scikit-learn

WORK EXPERIENCE

Generative AI Developer Intern — AI WALLAH | Jun 2025 – Jul 2025

- Integrated LLM-powered features into React applications, boosting chatbot response relevance by 35% through targeted prompt engineering.
- Designed prompt templates and caching layers to reduce API calls by 25%, lowering monthly costs by ₹900.
- Built context-aware conversation flows, improving multi-turn accuracy by 20% in testing.

AWS Cloud Security Intern — Employability.life | Apr 2025 – Jun 2025

- Developed and executed 25+ test cases for AWS EC2, S3, and Lambda workflows, identifying 12 security gaps and leading to 100% remediation.
- Implemented IAM policy simulations, reducing over-privileged roles by 40%.
- Collaborated with engineering to harden deployments, achieving zero high-severity findings in post-audit reviews.

PROJECTS

- **AI Weather Hub** : [Github](#) - Real-time weather app with AI assistance (React + Gemini).
 - Built a real-time weather application with AI-generated travel tips, achieving 500+ daily queries in testing.
- **Quiz-o-pedia** : [Github](#) - Full-stack AI quiz platform (Next.js + Nest).
 - Implemented AI-assisted question generation; decreased quiz creation time by 60% for admins; designed database schema for quiz, users, and leaderboard; added auth and scoring logic.
- **RAG-Powered QA System** : [Github](#) - LangChain RAG pipeline (Python + ChromaDB + Multi-LLM)
 - Built a production-ready Retrieval-Augmented Generation system using LangChain framework for PDF document querying; integrated ChromaDB vector store, PyPDF ingestion, and multi-provider LLM fallback (Gemini, OpenAI, Cohere) with automated testing and Docker deployment.

EDUCATION

B.Tech, Computer Science & Engineering — Sister Nivedita University

Expected May 2026 • CGPA (up to 6th semester): 8.63

CERTIFICATIONS

- **IBM** : AI Developer (June 2025) [Certificate](#)
- **NVIDIA** : Building LLM Applications With Prompt Engineering (June 2025) [Certificate](#)
- **Google** : IT Automation with Python (June 2025) [Certificate](#)
- **IBM** : Data Analysis with Python (June 2025) [Certificate](#)
- **University of Michigan** : Applied ML in Python (May 2025) [Certificate](#)
- **University of Colorado Boulder** : SQL (April 2025) [Certificate](#)