HARIHARASUDHAN M

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My Portfolio   - linkedin.com/in/hariharasudhan-mg

CAREER OBJECTIVE

AI/ML Engineer with hands-on experience in building Generative AI, RAG, LLM orchestration, and full end-to-end ML pipelines. Strong practical knowledge of embeddings, vector databases, transformers, and model deployment. Seeking an AI Developer role to build AI/ML pipelines, and integration of AI systems into real-world applications.

EDUCATION

PPG Institute of Technology   **CGPA: 8.23**
Bachelor of Engineering in Computer Science and Engineering   *September 2022 - June 2025*

Nanjiah Lingammal Polytechnic College   **Percentage: 87.4**
Diploma in Mechanical Engineering   *June 2018 – June 2021*

TECHNICAL SKILLS

- **Core Machine Learning:** Deep Learning (PyTorch), Scikit-learn, First Principles, Algorithms.
- **Generative AI and NLP:** LLM Fine-tuning (PEFT), Transformers, Vector DB (Chroma), Graph DB (neo4j), Embeddings, RAG Pipelines, Tokenization, Prompt Engineering, Context Optimization.
- **Programming Languages:** Java, Python, JavaScript.
- **MLOps and Deployment:** Model packaging & versioning, Docker, Git, GitHub, REST, FastAPI, Flask.
- **Tools and Cloud:** LangChain, Hugging Face, Airflow (MLOps basics), Google Cloud Platform, Hugging Face.

WORK EXPERIENCE

Freelance ML Solutions Engineer   **August 2025 - Present**
- Developed an ML analytics engine for a retail client and redesigned a hospitality client's UX to drive retention.

Developer Intern - Guvi Geeks Network   **July 2024 - October 2024**
- Built a full-stack app (Java, Webpack, MySQL, MongoDB, Redis) and improved backend.

AI Support Engineer - Gao Tek RFID   **February 2024 - May 2024**
- Automated documentation workflows with AI tools, reducing manual effort in WordPress content management.

SAP ERP Apprentice - L&T Electrical & Automation   **August 2021 - August 2022**
- Managed stock creation, production tracking, and process navigation using SAP ERP in a manufacturing setup.

PROJECTS

Prod iQ AI - LLM Fine tuning, Machine Learning, RAG, MCP, Vector DB, State graph, SQL, MLOps. GitHub
- Collected and consolidated 42,000 real-world samples manually from 8 sources and engineered 387 features.
- Designed a Delta State Graph to track known/missing/assumed data and reduce hallucinations by 82%.
- Achieved measurable stability with 65% reliability via cross-validated reasoning using SQL + vector DB.

Titan Supply Chain AI - LangChain, Graph DB, Knowledge Graph, DCBA algorithm, LLM's, RAG pipeline. GitHub
- Modeled a Neo4j graph with more than 20000 nodes and 3000 relationships to trace multi hop disruptions.
- Predicted stockout scenarios, preventing revenue loss that can reach 5-10 crore for a high velocity ecommerce.
- Implemented a DCBA algorithm that cuts redundant LLM calls and reduces token compute cost by 45%.

EIDA Gamified Learning Platform - React, MongoDB, TensorFlow, YOLO, CV, STT. GitHub
- AI-powered educational platform for kids with interactive games, object recognition, and voice/text AI chat.
- Tailored features for different age groups, including quizzes, multimedia library, and engagement tracking.

PUBLICATIONS

- **LumiLearn**: Developed a personalized learning and evaluation platform using custom scoring algorithms, and GenAI-assisted recommendations. (MVP - EIDA Gamified Learning Platform) Link

KEY ACHIEVEMENTS

- **Best Outgoing Student 2025:** College-wide award for top academic, achievement, and leadership.
- **TNSCST Scheme:** Twice selected statewide under the government; awarded 10K funding for each AI project.
- **NM-AU-TNCPL Hackathon:** Top 20 out of 49,000 teams and 478 colleges; awarded a paid internship.
- **NGI-TBI Hackathon:** 1st place among 100 teams; won 10,000 cash prize.