GenAI & LLM Bootcamp Curriculum

Master AI, Build Real-World LLM Projects, and Become Industry-Ready

Course Details:

- Duration: 6 Weeks
- Weekend Physical Classes in Hyderabad
- Live Doubt Clearing on Discord (1-2 sessions per week)
- Batch Size: Limited to 30 students

What You'll Achieve:

- Understand LLMs, Generative AI, and AI Agents
- Build 4 Hands-On Projects (Portfolio-Ready)
- Learn APIs, Fine-Tuning, RAG, Agents, & Open-Source Models
- Deploy AI Applications and even create your own Mini-LLM!

Week 1: Understanding LLMs & Prompt Engineering

- AI vs Generative AI
- How LLMs work - Tokens, prompting, fine-tuning
- Prompt Engineering - Writing better prompts
- LLM Performance Factors & Configurations
- LangChain Basics & Hallucination Handling
- Popular LLMs: OpenAI, Gemini, Open-Source models (Ollama, Mistral)
- Using LLM APIs - Tokens, cost, best practices
- Project: Mini Chatbot

Week 2: Embeddings, Vector Search & RAG

- Embeddings (ADA-002)
- Vector Search & Similarity Search (Cosine, Dot Product)
- Vector Databases & RAG (Retrieval Augmented Generation)
- Keyword Search vs Semantic Search
- Project: PDF Q&A Bot

Week 3: AI Agents & Agentic RAG

- What Are Agents?
- Agentic AI & Agentic RAG
- Langraph - AI Agent Framework
- Project: Agentic AI RAG Bot

Week 4: Build a Fully Functional AI Agent

- Project: Advanced AI Agent (End-to-End AI System)

Week 5: Running Open-Source LLMs & Fine-Tuning

- Running Open-Source LLMs on Local CPU/GPU
- Fine-Tuning Basics & LoRA (Low-Rank Adaptation)

Week 6: Build Your Own Mini-LLM

- How LLMs are built from scratch
- Tokenization & Dataset Preparation
- Training a Small Transformer Model (NanoGPT)
- Project: Train a Mini-LLM

Final Deliverables (What Students Take Away)

- 4 Full-Stack AI Projects (Perfect for GitHub & Resume)
- Certificate of Completion
- Hands-on Experience with API & Open-Source LLMs
- Discord Community Support (Post-Course)
- Portfolio-Ready AI Skills for Jobs & Internships

Why This Course is a Game-Changer

- Trending Skills: AI & LLMs are shaping the future.
- Job-Ready Knowledge: Students can showcase real AI projects.
- Hands-On Approach: Learn by building, not just theory.
- In-Person Classes: Personalized guidance & networking.