Vuppala Manikanta

Education

Keshav Memorial Institute of Technology, Hyderabad	2023 – 2026
B.Tech in Computer Science Engineering (AI & ML)	GPA: 8.25/10
Teegala Krishna Reddy Engineering College, Hyderabad	2020 - 2023
Diploma in Computer Engineering	GPA: 9.25/10
Sri Sai Siddhartha High School, Hyderabad	2013 – 2020
SSC (State Board of Telangana)	GPA: 10/10

Projects

 $egin{aligned} \mathbf{AI-PathGen} \end{aligned} \qquad \qquad Apr~2024-Jul~2024 \end{aligned}$

MERN Stack, LangChain, Cohere API

- Developed a smart ed-tech platform for generating adaptive learning quizzes and summaries using GenAI.
- Enabled content customization using LangChain and Cohere for quiz generation with over 90% accuracy in content relevance.
- GitHub: github.com/manivuppala124/AI-PathGen

TaskAgent - Autonomous AI Planning Agent

June 2025 - Present

Tech Stack: FastAPI, Gemini 1.5 Flash, LangGraph, Streamlit, LangChain

- Designed and implemented an autonomous planner that transforms natural language goals into structured execution plans.
- Utilized LangGraph and Gemini 1.5 Flash for dynamic task decomposition and intelligent execution flow.
- Built a modular architecture enabling LLM-driven planning and real-time task tracking in Streamlit
- GitHub: github.com/manivuppala124/TaskAgent

EduBot Pro – AI Document Assistant with RAG + LangChain

June 2025 - Present

Tech Stack: Python, FastAPI, LangChain, Google Gemini 1.5 Flash, FAISS, Streamlit

- Built a Retrieval-Augmented Generation (RAG) based AI assistant for answering queries from uploaded PDF documents.
- Engineered a full pipeline: PDF ingestion, chunking, Gemini embeddings, FAISS vector search, and answer generation.
- Designed a modern Streamlit frontend for real-time document uploads, interactive Q&A, and clean UX.
- Implemented as a working prototype in a local environment; deployment planned in future iterations.
- GitHub: github.com/manivuppala124/EduBot

Technical Skills

Languages: Java, Python, C++, JavaScript

Web Development: React.js, Node.js, Express.js, HTML5, CSS3, Tailwind CSS

Databases: MongoDB, MvSQL

DevOps & Cloud: AWS (EC2, S3, Lambda), Docker, Git, GitHub Actions

ML / AI / NLP: TensorFlow, PyTorch, Scikit-learn, LangChain, OpenAI API, Cohere, NLP, Deep Learning

Tools: Postman, Google Colab, VS Code, Linux/Unix

Relevant Coursework: Operating Systems, Deep Learning, DBMS, Parallel Programming, Software Engineer-

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Soft Skills

Quick Learner • Team Player • Good Communication • Creative Problem Solver

Certifications

Industrial Training – NSIC (2022)

Topics Covered: Java, Python, Cybersecurity, Data Science Foundations