

TALLAPALLI GURU VENKATA NAGA MADHU SUDHANA

Andhra Pradesh, IN | P: +91 6302799579 | tallapallimadhu12@gmail.com | Portfolio

EDUCATION

VELLORE INSTITUTE OF TECHNOLOGY

Bachelor of Technology, Computer Science and Engineering

Cumulative GPA: 8.67/10.0

Chennai, TN

Jun 2021 - May 2025

SAI VIKRAM JR COLLEGE

Stream: Science(Physics, Chemistry, Maths)

Cumulative Percentage: 95.7/100

Giddalur, AP

Jul 2019 - Jul 2021

WORK EXPERIENCE

ASCENDION

AI & Data Scientist (Dept: Generative AI)

Chennai, TN

Aug 2025 – Present

- Applied Generative AI, NLP, and Machine Learning techniques to deliver AI-driven solutions for business use cases.
- Designed and implemented MLOps pipelines with Docker for containerized deployment, ensuring scalable and reproducible environments.
- Built RAG (Retrieval-Augmented Generation) applications integrating Qdrant for semantic search and enterprise document Q&A.
- Worked on Time Series Forecasting, Deep Learning, and Fine-Tuning LLMs for domain-specific applications. Developed multi-agent architectures using LangGraph, CrewAI, and Agentic AI solutions.
- Deployed multiple end-to-end AI/ML projects on AWS leveraging SageMaker, Lambda, S3, ECR and EC2 for training, deployment, and data management.

GO YAANA

Machine Learning Engineer Intern

Remote

Aug 2023 – Oct 2023

- Developed a regression model with 10,000+ data points, refining feature selection to boost accuracy by 91% in suggesting personalized travel destinations.
- Executed comprehensive data preprocessing, analysis, and visualization using Matplotlib and Seaborn for strategic planning.

PROJECTS

RETRIEVAL - AUGMENTED GENERATION FOR DOCUMENT QUESTION ANSWERING

Feb 2025

Tech Used: LLM, RAG, OLAMA LILAMA2, Streamlit, LangChain

- Designed and implemented a question-answering system leveraging Retrieval-Augmented Generation (RAG) and Large Language Models (LLMs) for efficient information retrieval from PDF documents.
- Integrated LangChain for pipeline management, Chroma for vector-based retrieval, and Ollama for locally hosted LLM deployment, ensuring data privacy and cost efficiency.
- Achieved high accuracy and contextual relevance in generating answers to user queries.

ONLINE VOTING APP

Nov 2024

Tech Used: MongoDB, Express.js, React, Node.js(MERN Stack)

- Designed and launched a seamless Online Voting App, ensuring a seamless digital voting experience.
- Successfully launched the app with features tailored for online voting, enhancing accessibility and engagement for a broad user base.

SKILLS AND CERTIFICATIONS

Technical Skills: SQL, HTML, CSS, Java Script, MERN full stack, Git, ML, PowerBI, LLM, DL, Gen-AI, Docker, RAG

Programming Languages: Python, CPP

Languages: English, Telugu and Hindi

Certifications & Training:

- Completed MERN full stack development course from ETHNUS (Certificate)
- Completed Generative AI and ChatGpt course from geeksforgeeks (Certificate)
- Completed Generative AI Level 101 course from Cognixia (Certificate)