

Swamy Pothabattula

+91 8309518718 | swamy18718@gmail.com | [linkedin](#) | [github](#)

OBJECTIVE

I aspire to be part of an organization where I can take on new challenges and responsibilities. I believe in learning from every experience and consistently striving to do my best. I am eager to grow with the organization and contribute positively to its success.

EDUCATION

Vellore Institute Of Technology, Amaravati <i>Bachelor of Technology in Computer Science and Engineering-AIML</i>	Dec 2021 – May 2025 CGPA: 9.06
Sri Chaitanya Junior College, Vijayawada <i>Higher Secondary Education</i>	May 2019 – Mar 2021 Percentage: 97.7
Roots School of Essential Faculties, Tanuku <i>Secondary Education</i>	May 2018 – Mar 2019 CGPA: 9.8

TECHNICAL SKILLS

Languages: Java, Python, SQL (MySQL)
Web Technologies: HTML, CSS, JavaScript
Frameworks: React, FastAPI, LangChain
Libraries: Pandas, NumPy, Matplotlib, scikit-learn, TensorFlow, Streamlit
Tools: VS Code, Jupyter Notebook
Concepts: Transformers, LLMs, Retrieval Augmented Generation (RAG)
Coursework: DSA, DBMS, OOPS, Machine Learning, Deep Learning, Generative AI

PROJECTS

Full-Stack AI Chatbot with PDF Support and Authentication

- Developed a ChatGPT-like web application using React and FastAPI, enabling users to interact with an LLM-powered chatbot through a modern UI.
- Implemented user authentication using JWT, with credentials and chat history stored securely in MongoDB.
- Integrated PDF upload functionality, allowing users to ask questions based on the content of uploaded documents.
- Built a responsive frontend with React and connected it to FastAPI backend using Axios for communication.

Natural Language SQL Chatbot using LangChain and LLMs

- Developed a Streamlit-based chatbot that allows users to query SQL databases using natural language.
- Integrated LangChain's SQLDatabaseToolkit with Llama3-8B via Groq API to convert user queries into SQL.
- Connected to remote MySQL databases using SQLAlchemy for secure and flexible database access.
- Implemented conversational history using Streamlit's session state to enable interactive and context-aware database queries.

Sentiment Analysis on Amazon Reviews using RNN

- Built an NLP-based sentiment analysis model using RNN to classify Amazon reviews as positive or negative.
- Preprocessed text data using tokenization, stop-word removal, and word embeddings.
- Trained and optimized the RNN model for achieving high accuracy in sentiment classification.
- Deployed the model using Streamlit, creating an interactive web application for real-time sentiment analysis of Amazon reviews.

CERTIFICATIONS

AI and ML Certification <i>SmartInternz (Powered by Google Developers)</i>	Aug 2023 – Nov 2023
Complete Generative AI Course with LangChain and Hugging Face <i>Udemy</i>	Jan 2025 – Jun 2025

ACHIEVEMENTS

LeetCode Problem Solving | *Data Structures and Algorithms*

- Solved over 350+ problems on LeetCode, demonstrating strong problem-solving skills.

SQL Mastery on HackerRank | *Database Management*

- Solved 50+ SQL problems on HackerRank, showcasing strong SQL and data manipulation skills.