

EDAMALAPATI MOTHILAL CHOWDARY

mothilalchowdary99@gmail.com | [+91 9573464113](tel:+919573464113) | [Linkedin](#) | [Github](#)

SUMMARY

B.Tech Computer Science Engineering (Artificial Intelligence) graduate (2025) with hands-on experience in Python, SQL, Machine Learning, Generative AI and backend development, seeking an entry-level role as a Software Engineer. Strong understanding of OOP, SDLC, and core software engineering principles. Hands-on experience in building Machine Learning and Generative AI systems. Passionate about developing scalable, data-driven software systems and exploring Generative AI solutions.

SKILLS

Programming Languages : Python, SQL.

Frameworks & Libraries : FastAPI, Django, JWT, Scikit-learn, Pandas, Matplotlib.

Machine Learning : Supervised & Unsupervised Learning, Feature Engineering, Model Evaluation.

Generative AI: Prompt Engineering, LLM fundamentals, Retrieval-Augmented Generation (RAG) – Fundamentals.

Tools & Technologies: Git, GitHub, Jupyter Notebook, VS Code.

EDUCATION

Bachelor of Technology (B.Tech), Computer Science – Artificial Intelligence 2021 – 2025

Sreenivasa Institute of Technology and Management Studies, Chittoor | **CGPA: 7.5**

Intermediate (MPC)

Sri Vivekananda Junior College, Chittoor | **Percentage: 95 %** 2019 – 2021

SSC (10th Class)

Vignana Deepthi English Medium School, Chittoor | **GPA: 9.7** 2018 – 2019

PROJECTS

SecureDoc AI : RAG Chatbot with RBAC | [Github](#) 2026

Tech Stack : Python, Fastapi, PostgreSQL, SQLAlchemy, Langchain, Qdrant Vector DB, JWT, Groq(Llama 3.1), Sentence-Transformers

- Developed a Retrieval-Augmented Generation (RAG) system using FastAPI to allow users to query private documents using natural language with responses powered by Llama 3.1.
- Implemented custom Role-Based Access Control (RBAC) integrated within the Qdrant Vector DB search layer, ensuring document retrieval is strictly filtered based on user permissions.
- Developed an backend pipeline for document processing, including chunking and embedding generation using Sentence-Transformers.
- Designed a secure Backend Architecture with JWT-based Authentication and Argon2 password hashing to protect user data and manage access permissions.

Substance Usage Prediction using Machine Learning | [Journal Paper](#) | [Github](#) 2025

Tech Stack: Python, Scikit-learn, XGBoost, Random Forest, Pandas, Matplotlib, Django, HTML, CSS

- Developed a predictive analysis system to identify drug consumption patterns with 84% accuracy using demographic and psychological data.
- Conducted extensive Exploratory Data Analysis (EDA) and feature engineering to identify critical behavioral predictors, optimizing model performance across Random Forest and XGBoost architectures.
- Integrated the trained model into a Django backend to handle user inputs and generate real-time predictions.
- Published & Presented: Authored research paper “Predicting Substance Consumption Patterns Using Behavioral Analytics and Demographic Details” (IJIRT, 2025) and presented findings at the ICAIES International Conference (SITAMS).

INTERNSHIP EXPERIENCE

Intern - Technology Department

TeamLease Services Limited, Bangalore | Feb 2025 – May 2025

- Developed interactive data visualization dashboards using Python (Pandas, Plotly) to track and analyze HR-specific datasets, transforming raw data into clickable, executive-level insights.
- Performed Exploratory Data Analysis (EDA) on large-scale datasets, identifying hidden workforce patterns and anomalies to support data-driven decision-making.
- Synthesized technical findings into strategic reports, presenting actionable insights to the technology leadership team.

CERTIFICATIONS

- **Data Quality Analyst Internship Training** – Rومان Technologies, 2025
- **Python Training** – Besant Technologies, 2025
- **Python Full Stack Short-Term Internship** – ExcelR EdTech, 2024