

# NAGA REVANTH REDDY SALLEPALLE

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Revanth

Github

## EDUCATION

International Institute of Information Technology, Hyderabad

October 2022 - Present

Bachelor of Technology in Computer Science Engineering (Honors) - Expected May 2026

CGPA: 8.16/10

**Relevant Coursework:** Data Analytics, Software Engineering, Intro to NLP, Statistical Methods in AI, Causal Inference, Design and Analysis of Software Systems, DBMS, Operating Systems and Networks

## EXPERIENCE

Machine Learning Lab, IIIT-H | Undergraduate Researcher

May 2024 - Present

- Conducted research in **causality**, **imitation learning**, multi-view learning, and **automated data analysis** under the guidance of **Dr. Naresh Manwani**.
- Developing data integration strategies for merging datasets **lacking common identifiers** in a research collaboration with **J.P. Morgan Chase & Co.**
- Engineered a novel **AutoEDA** (Automated Exploratory Data Analysis) framework for relational databases, improving **single-table analysis** performance by **20%** and **extending** it to **multi-tabular** settings

Product Labs, IIIT-H | Software Development Intern

Jan 2024 - April 2024

- Built **Roti-Kapada-Makan**, a full-stack **Flutter** app in an agile team, engineering a core platform to connect **donors and NGOs** with verified aid-seekers.
- Implemented key features, including secure mobile OTP authentication, multi-language support (**10+** languages), and a **crowd-sourced contribution verification** system.

## PROJECTS

Sales Data Warehouse | OLAP, Data Warehousing

[Source Code](#)

- Architected a high-performance **Data Warehouse** in DuckDB, transforming 9 raw transactional datasets into an optimized **Star Schema** that streamlined analysis for over **\$7.6M** in sales revenue.
- Formulated a complete **ETL** pipeline using Python and SQL to extract, clean, transform, and load multi-table retail data into an analysis-ready warehouse.
- Designed OLAP SQL queries (**drill down**, **cube**, and **rollup**) to **diagnose** a critical 2018 **revenue drop** and **identify** key performance drivers, such as a single staff member generating **34%** of **total** company revenue.

Power Analysis in Conversations of Gen-Z | BERT, T5, LIME, Python

[Source Code](#)

- Constructed a **T5 style-transfer** model, fine-tuned on a parallel dataset generated by **LLMs (Llama3, Gemma2)**, to translate the formal Enron corpus into a Gen-Z slang equivalent.
- Quantified a **7.91% accuracy drop** (93.21% → 85.30%) in a BERT classifier on the slang corpus, using **LIME** to pinpoint slang-induced ambiguity as the root cause.

EDA Notebook Generation | SQL, Pandas, FastAPI

[Source Code](#)

- Built an **interactive** FastAPI-based web interface that dynamically constructs and executes **SQL/Pandas** workflows to streamline data **exploration** and visualization.
- Automated the generation of complete **EDA notebooks** from user-defined inputs, with the platform adopted by **100+** **users** to accelerate analysis and reporting.

Multi-Objective CNN | CNN, AutoEncoders, MLP

[Source Code](#)

- Formulated **multi-task** CNN models for digit classification & count regression on Double MNIST, achieving perfect accuracy and zero MSE.
- Developed and benchmarked **CNN vs. MLP** Autoencoders on FashionMNIST, improving reconstruction error from **0.0158** (MLP) → **0.0000** (CNN) through architectural optimization.

## SKILLS

**Languages:** Python, SQL, C++, C, JavaScript, GraphQL

**Frameworks & Libraries:** PyTorch, Pandas, NumPy, FastAPI, React, Node.js

**Data & Tools:** Data Warehousing, OLAP, Docker, MongoDB, MySQL, Git, WandB

## ACHIEVEMENTS & POSITION OF RESPONSIBILITIES

- Achieved an All India Rank (AIR) of **680** (Top 0.44%) in **JEE Advanced** from a pool of 156,000 students.
- Secured an AIR of **689** (99.92 percentile) in **JEE Main** among over 900,000 candidates.
- Highest rating of **1384**(Pupil) on **Codeforces**.

## POSITION OF RESPONSIBILITIES

- Teaching Assistant** for the courses Probability & Statistics and Linear Algebra.
- Served as an **Apex Mentor**, responsible for inducting new students and providing mentorship.