OMKAR AMLAN KRISHNA

Rourkela, Odisha

📱 +91-7873357181 ✉ omkaramlankrishna@gmail.com in OmkarAmlan ○ OmkarAmlan

Education

National Institute of Technology, Rourkela **Dec 2021 – June 2025**
Bachelor of Technology in Electrical Engineering *Rourkela, Odisha*

Relevant Coursework

- Data Structures
- Algorithms Analysis
- Artificial Intelligence
- Database Management

Experience

Rakuten India **Jan 2025 – Present**
Technical Intern *Bengaluru, Karnataka*

TECH STACK: Django — LLMs — Langchain — Python

- Developing frameworks for Agentic AI observability, with accurate tracing and agent reasoning and action evaluation.
- Designing metrics for LLM robustness scores as well as Supervised Fine Tuning and Reinforcement Learning methods to enhance LLM robustness.
- Implementing existing security modules into observability pipelines to ensure LLM Response quality and compliance.

Wells Fargo **May 2024 – July 2024**
Program Associate Intern *Chennai, Tamil Nadu*

TECH STACK: Python — Vaiational AutoEncoders — Flask

- Developed a Variational AutoEncoder (VAE) based synthetic data generator for value at risk (VaR) estimation by synthetic data generation via PyTorch, achieving a Mean Square Error (MSE) loss improvement of over 40% compared to statistical methods like Variance-Covariance method.
- Generated over 500 synthetic datasets, validated by vector-norm regularization.
- Implemented a reverse-proxy round-robin load-balancer via Flask to expose AI and back-end services to the front-end.

Projects

Slay: Hyper-personalized Shopping App | *Flask, ReAct Agent, Vector Databases* **August 2024**

- Developed a gesture-based shopping app with hyper-personalized recommendations with a swipe-to-style user interface.
- Implemented vector databases via Pinecone and stored over 7000 embeddings of database items for identification of features.
- Implemented personalized skin tone analysis using OpenAI API to recommend best-fit color recommendations.
- This project bagged the title of National Winner at Rakathon 2024, hosted by Rakuten India among 800+ submissions.

eGymBro: Training Assistant | *MediaPipe, DialogFlow, OpenCV* **March 2023**

- Developed a MediaPipe-based web application for pose correction, and rep tracking in resistance training.
- Maintained user rep logs and stored all training sets and repetitions in user accounts.
- Curated datasets with 3000+ data-points for body measurements and body-fat and trained a body-fat prediction model with Mean Square Error (MSE) of less than 4%.
- This project was the Eastern Region finalist at GFG Solving for India 2023.

Technical Skills

Languages: Python, C/C++, HTML/CSS, SQL, Cypher
Developer Tools: VS Code, MySQL Workbench, Google Cloud Platform
Technologies/Frameworks: GitHub, Anaconda, Flask, FastAPI, Langchain, PyTorch, Graph Databases

Leadership / Extracurricular

Training Committee **Nov 2024 – Present**
Chief Coordinator *National Institute of Technology, Rourkela*

- Created and implemented methodologies for improving the 2400+ talent pool at NIT Rourkela.
- Currently curating tests, and simulations relevant to the contemporary market for new engineering graduates.
- Led a team of 25 training coordinators, optimizing resumes, conducting recruitment simulations, and curating resource pools and problem sets.