

A YASHWANTH

Hyderabad, India · yashwanth.alakky@gmail.com · +91 8332981498 · www.yash.fr

Machine Learning Engineer with experience building production ML systems from ground up, backed by strong theoretical foundations and demonstrated ability to adapt solutions across business domains

WORK EXPERIENCE

Zodhya

Machine Learning Engineer

Hyderabad, India

12/2021 - Present

- As a **founding ML engineer**, I architected and implemented deep learning solutions that expanded product capabilities from small retail spaces to large-scale commercial buildings and airports.
- Designed and deployed ML systems handling **100+** real-time sensor inputs per minute across multiple HVAC zones, achieving **30%** reduction in energy consumption, **~250,000 electricity units** annually.
- Built internal deep learning toolkit using **PyTorch** and **OpenAI Gym** that reduced experiment cycle time from weeks to days and standardized training across the team.
- Built an **RAG** for automated report generation using **LLMs** that processes real-time energy monitoring data to generate instant insights and answer ad-hoc client queries, eliminating manual report generation.

Consultant

Machine Learning Engineer

12/2020 - 1/2022

- Developed a novel **NLP**-based sequence matching system for analyzing urban mobility patterns across **6500+** individuals, achieving **92% accuracy** in predicting daily activity patterns.
- Engineered features incorporating socio-economic factors, spatial data, and temporal patterns to optimize urban mobility predictions for a major Indian city simulation project.

EDUCATION

University of Hyderabad

Postgraduate Diploma **Artificial Intelligence and Machine Learning**

Hyderabad, India

08/2021 - 10/2022

Jawaharlal Nehru Institute of Technology

Bachelor of Technology **Computer Science and Engineering**

Hyderabad, India

05/2016 - 09/2020

PROJECTS

Bazax Dysphagia Disease Prediction and Risk Scoring Model

Research project with **Weill Cornell Medicine** for predicting new Onset Dysphagia post-ARS. Built a novel risk-scoring model to predict the presence of dysphagia with **83% sensitivity**.

Malware Classification using Machine Learning

Built a classifier to detect malicious software using Microsoft's malware dataset. Engineered novel features from ASM and operation code files including n-gram patterns and instruction frequencies. Processed and analyzed over **120GB** of binary data to achieve **0.008 log loss** through extensive feature engineering and gradient boosting techniques

PayRec

Worked on the core algorithm that predicted loan defaulting and built a video chatbot feature using **WebRTC** and **Dialogflow** for the application.

SKILLS

Languages: Python, SQL, C++
Frameworks: Pytorch, Scikit-Learn, NLTK, LangChain
Developer Tools: GCP(Vertex AI), Git, Docker
Domain Specific: TinyML, ONNX, EnergyPlus

ACHIEVEMENTS

Winner - Smart India Hackathon, Ministry of Education

Awarded the **first place** for the loan recovery application developed for the Ministry of MSME.

03/2019

IEEEExtreme - All India 81 Rank, IEEE

Participated In IEEEExtreme 2019 and scored a country-wide rank of **81**.

08/2019

Co-Founder, coding.Studio();

Co-founded the programming club of my college with a goal of inculcating coding culture among our fellow students. Organized several bootcamps and competitive programming contests.