# **MANIT ROY**

## SUMMARY

Al enthusiast with expertise in Generative Al, LLMs, and deep learning, driven to transform healthcare through AI innovations. Proficient in LLM fine-tuning, automation, and AI-driven solutions, with hands-on experience in building intelligent systems. Passionate about leveraging advanced AI technologies to develop impactful and scalable solutions. Excited to contribute to groundbreaking projects at Arogo Al.

## **EDUCATION**

B.Tech CSE & MS CND - IIIT Hyderabad Aug 2023 - Dec 2028 12<sup>th</sup> – Tehatta High School, West Bengal Apr 2020 - Jun 2022 10<sup>th</sup> – Tehatta High School, West Bengal Jan 2016 - Feb 2020

## **EXPERIENCE**

### Al Engineer Intern

Techgrit

Feb 2025- Present

Contributing to the AskFido project by developing AI algorithms that provide intelligent recommendations on stock portfolios and assist users in building optimized investment portfolios.

# **PROJECTS**

#### Al Gadget Finder (Repo Link)

Created an Agentic RAG chatbot using an open-source large language model Mistral, LangChain which is capable of giving gadget recommendations based on users' need and budget constraints and is also capable of tracking realtime price of products using Google Search Agent.

#### Wildfire Alert System (Repo Link)

Developed a web application for wildfire risk prediction using satellite imagery, earning second place at Megathon. The app uses Mapbox for satellite image retrieval and a deep learning model for risk assessment, triggering alerts for high-risk scenarios. Features include heatmap visualization, safe-pathway navigation, and emergency shelter recommendations.

# Captcha Solver (Repo Link)

Developed an OCR CAPTCHA solver utilizing a Convolutional Recurrent Neural Network (CRNN) with Connectionist Temporal Classification (CTC) loss. The project involved generating synthetic data to train the model, enabling effective sequence recognition and text extraction from CAPTCHA images. Achieved a robust accuracy of 94%.

# **ACHIEVEMENTS**

- Secured 2nd place in the biggest student-led hackathon in Hyderabad, Megathon by E-Cell with over 600 participants, by developing an innovative Wildfire Detection and Alert System.
- Awarded ₹ 27.5k in Startup Aid for winning the pitch competition and Implementation round with the AI Gadget Finder project.
- Secured first place as a team in the Maze Solver competition conducted by IIT Hyderabad, receiving prize money of 8k.

# CONTACT

+91 96412 36635



manit.roy@research.iiit.ac.in



https://manit2004.github.io

## SKILLS

- С
- Python
- TensorFlow
- Scikit-Learn
- React
- Express JS
- SQL
- Generative Al
- Langchain
- Numpy
- Matplotlib
- Pandas
- Shell Scripting
- Networking
- Git, GitHub

## INVOLVEMENTS

- **Electronics & Robotics Club** 
  - Tech Team Member
- **Pentaprism** 
  - Photography Team Member
- Cyclorama
  - Production Team Member
- **Clubs Council** 
  - Undersecretary