

IBRAHIM M

+917845217523.ibrahimmsamael@gmail.com-Chennai, TN ·

MECHANICAL ENGINEER & AI-ML ENGINEER

As a mechanical engineering student, I possess a unique blend of expertise in both Machine Learning and mechanical domains. My academic journey has equipped me with a solid foundation in engineering principles while also delving into the intricacies of Machine Learning applications within this field. Beyond technical prowess, I bring a high level of motivation, coupled with exceptional leadership abilities and strong communication skills.

EDUCATION

Bachelor of Engineering

EXPECTED GRADUATION - 2025

Majors: Mechanical Engineering
Chennai Institute of Technology
CGPA : 8.23

PROFESSIONAL EXPERIENCE

AIROSSPACE R&D Pvt Limited AI-ML Engineer Intern

MAY 2023 - AUG 2023

- Implemented **YOLO v5** on drones with advanced capabilities for detecting small objects
- Extracted **geo-coordinates** simultaneously with object detection using integrated GPS technology
- Established a robust network infrastructure facilitating real-time data transfer and coordination among drones
Engineered customized **on-board processing** methods to optimize efficient detection and **geo-coordinate extraction** (never achieved before in the context of drone imagery).
- Achieved precise **object detection** and **accurate location mapping** within a compact and streamlined framework

CAPCP Engineering Services VAVE Intern

SEPT 2023 - OCT 2023

- The project focuses on cost reduction through vehicle part analysis and comparison, utilizing **Value Engineering** for **adaptive designs**.
- Real-life driving simulations, enhanced testing, while **proposals** for material and **manufacturing process** changes aim to **optimize cost efficiencies**.

PROJECTS

GPT-2 Fine Tuning

JAN 2024 - MAR 2024

- Proficient in fine-tuning GPT-2 models for specialized tasks, enhancing language generation capabilities. Employed advanced **web scraping techniques** to extract relevant data from **diverse websites**, ensuring comprehensive information retrieval.
- Utilized **Tesseract OCR** for precise **extraction of text from images in PDFs**, contributing to improved model understanding of **image-based** content.
- Achieved successful outcomes, developing models that generate context-aware content based on data.

AJUTOR

OCT 2022 - DEC 2022

- A platform for building a **bridge between consumers and manufacturers**. The specific task of this
- platform is to **reduce the wastage** and **reduce over production**.
- This platform is also linked with departmental stores and super markets.
- It included basic **Machine learning** algorithm to fulfill the task.

KEY COMPETENCIES

- | | | |
|----------------------------------|----------------------------------|------------------------------|
| • Time Management | • Java, C++, Python, Springboot | • Sound Knowledge in MySQL |
| • Data-driven strategic planning | • Risk Management skills | • Machine learning |
| • Financial Management | • Excellent communication skills | • Proficient in Keras, NLTK, |
| • Full-Stack Development | • Prompt Engineer | Deepface, Face Recognition, |
| | | Pytorch, Tensorflow. |

LANGUAGE FLUENCY

- ENGLISH - PROFESSIONAL PROFICIENCY
- TAMIL - NATIVE PROFICIENCY
- HINDI - NATIVE PROFICIENCY
- ARABIC - PROFESSIONAL PROFICIENCY
- FRENCH - CONVESATIONAL PROFICIENCY

SPORT ACTIVITIES

- Athletics
- Volley Ball
- Boxing

RESEARCH PUBLICATIONS

- Utilized **YOLOv5** for extracting co-ordinates of **sub-centimetric objects** on ground from **Drone Imagery** from an altitude of 20 meters.

EXTRACURRICULAR ACTIVITIES

TEDx SPEAKER

On NET-ZERO

MARTIAL ARTS

District Champion

BEST STUDENT AWARDEE

For Excellence in Both Academics & Sports.

CERTIFICATIONS

- CISCO certified **Cyber security CCNA 1 & 2**.
- COURSERA certified **SQL Data querying**.
- SKILLUP certified **Full-Stack Development**.
- COURSERA IBM certified Introduction to **MACHINE LEARNING**.