

# RAGUL T

## MACHINE LEARNING ENGINEER

☎ - 8838868452

✉ - [tragulragul@gmail.com](mailto:tragulragul@gmail.com)

in - [www.linkedin.com/in/ragul-t-](https://www.linkedin.com/in/ragul-t-)

🐙 - <https://github.com/ragultv>

---

## CAREER OBJECTIVE

With a passion for AI exploration and strong academic background in machine learning engineering. I'm eager to contribute to the industry as a machine learning engineer through research and projects.

## EDUCATION

- B.Tech AIML-(2022-2026) SNSCT , coimbatore  
CGPA : 8.14 upto 4th Semester
- HSE-(2021-2022) DSM hr sec School , Perambalur  
Percentage : 86%
- SSLC-(2019-2020) DSM hr sec School , Perambalur  
Percentage : 95%

## PROJECTS

### **NANOTRACK - A Lightweight Detecting & Tracking Python Library :**

- Developed and published a lightweight Python library for detecting and tracking in computer vision applications. NanoTrack is optimised for speed and minimal resource usage, making it ideal for real-time applications .
- This library is built using Ultralytics ,Computer vision ,Torch ,Numpy ,Scipy for optimization.

### **Animal Detection In Farmland :**

- This project helps to protect farmland from animals and animal habitats. They detect the animal intrusion in the farm and trigger a siren to deter the animal and send sms to the owner of the farm.
- Used Technologies are Python,Computer vision, Tensorflow ,SSD etc.

### **Smart Face Attendance System:**

- This project is to help to reduce the proxy attendance . which recognize the students face and mark attendance and collects reasons for being late the attendance and reasons are stored in the excel sheet.
- Used technologies are Python, Computer vision, Torch , Sci-Kit learn and SQLite for databases.

## INTERNSHIP

### **Machine Learning Internship at Cognifyz Technologies(March-April 2024).**

- Throughout the internship, I utilised Python and Scikit-learn for model building, data preprocessing, and model evaluation.
- This internship enhanced my practical understanding of machine learning algorithms and their real-world applications.
- Tasks: Predict the Restaurant Ratings, location based analysis, Restaurant recommendation , cuisine classification.
- Technologies used are Python , Sci-Kit learn ,Matplotlib and pandas.

## Machine Learning Internship at The Reciprocal Solution(June 2024 - present).

- During my internship, I worked with Flask to build APIs for model deployment and worked with Postman for API Testing.
- I learned PyTorch basics, focusing on Machine learning Algorithms and Convolutional Neural Networks.
- In Computer vision,I implemented Object detection using YOLO, Face recognition with DeepFace, and Face detection using RetinaFace and InsightFace for high accuracy.
- I also worked on Optical Character Recognition tasks using PaddleOCR and Multi-Object Tracking using FastMOT and DeepSORT.
- Utilised Docker for containerization and deployment of machine learning models.
- Currently, I am learning Ubuntu for better system administration and deployment skills.

## Virtual GenAI Internship Program at Skillible and AICTE (July-August 2024)

- **Introduction to Generative AI:** I learned how Generative AI creates new content by analysing patterns from existing data.
- **Fundamentals of Generative AI:** I explored foundational models like GANs and Transformers that power generative systems.
- **Terminologies and Concepts:** I gained familiarity with essential terms like latent space, training data, and overfitting.
- **Prompt Engineering:** I learned how to craft prompts to improve the output of generative AI models.
- **Generative Tasks, Limitations:** I understood the applications of generative AI and its inherent limitations.

## TECHNICAL SKILLS

- **Programming language** - Python and C.
- **Computer vision tools** - OpenCV , CNN , YOLO , Mediapipe etc..
- **Web Framework** - Flask , Gradio.
- **DevOps Tool** - Docker , Github.
- **ML Framework** - Sci-Kit learn , PyTorch(Basic) .
- **Version Control** - Git,Github.
- **Database** - SQL , SQLite.
- **API Development** - Flask for APIs , Postman for Testing.
- **Platform** - VS code , PyCharm.

## AREA OF INTEREST

- Machine Learning & Deep Learning.
- Computer Vision.
- Object Detection & Recognition.
- Natural Language Processing (NLP).

## CERTIFICATIONS

- **DBMS** - INFOSYS Springboard.
- **SQL** - INFOSYS Springboard.
- **GENAI Introduction** - Skillible,Accredited by AICTE.

## LANGUAGE

- TAMIL
- ENGLISH