

# Prem RAICHURA



## PROFILE SUMMARY

I am a Full-Stack and AI Developer with a strong focus on building intelligent, scalable, and user-centric solutions. I enjoy transforming complex ideas into clean, functional systems — from robust backend architectures to intuitive frontend interfaces. My experience spans across AI/ML-driven applications, deep learning research, and web development using technologies such as FastAPI, React, Vite, PHP, Django, and MySQL.

## CONTACT DETAILS

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- ✉️ premraichura7@gmail.com
- 🌐 Github
- 🔗 Linkedin
- 🌐 Portfolio

## SKILLS

- Php, Laravel, Python, Django, Flask, RESTful APIs, SQL, C, C++, Java
- TensorFlow, PyTorch, Pandas, NumPy, OpenCV, Keras
- Git, GitHub, Docker
- React.js, Bootstrap, Tailwind CSS
- MySQL, Firebase
- Communication and team collaboration

## COURSEWORK

- **Core Concepts:** Data Structures and Algorithms, Operating Systems, OOP, DBMS, Computer Networks

## EXPERIENCE

### ROUND TRIP RIDE

10 OCT 2022 – 3 NOV 2022

> Role: Backend Developer

- ◊ Built and optimized a responsive vehicle rental platform with real-time availability, booking, and review features.
- ◊ Developed backend logic and APIs using Core PHP, ensuring secure data handling and seamless frontend integration with HTML, CSS, Bootstrap, and JavaScript.

## PUBLICATION

### TRAFFICEYE: INTELLIGENT TRAFFIC OPTIMIZATION USING DEEP LEARNING APPROACH

> Published in IEEE International Conference on Artificial Intelligence and Machine Vision (AIMV 2025)

- ◊ Built and evaluated an AI-driven traffic optimization system using YOLOv5s on the IITM-HeTra dataset for real-time vehicle detection and analysis.
- ◊ Achieved 71 % detection accuracy with 1.4 ms inference time, surpassing YOLOv4, YOLOv7, and YOLOv8 models in performance.
- ◊ Optimized the deep learning pipeline for adaptive signal control and intelligent traffic management.
- ◊ Contributed to model development, experimentation, and results validation, leading to successful publication in IEEE AIMV 2025.

## PROJECTS

### TRAFFIC DENSITY & DETECTION WEB APP



> React + vite, FastAPI, YOLOv5s, AI/ML

- ◊ Developed a real-time traffic monitoring web app using FastAPI, React + vite, and YOLOv5s trained on the IITM-HeTra dataset.
- ◊ Achieved 71 % accuracy and 1.4 ms inference through an AI/ML-optimized pipeline for real-time traffic analysis.

### WEALTHEQUITY

> React + vite, Tailwind CSS, Email.js

- ◊ Developed the official WealthEquity website using React, Vite, and Tailwind CSS with a responsive, animated UI for an engaging user experience.
- ◊ Integrated Email.js for automated inquiries, boosting engagement and contributing to a 5+ client increase through improved digital presence.

### BOLTON REAL ESTATE

> Php, MySQL, PhPMailer

- ◊ Developed and managed a fully responsive real estate website with an integrated admin panel for property management using Core PHP and MySQL.
- ◊ Implemented secure backend logic, dynamic property listings, and contact functionality to enhance usability and streamline client-side operations.

## EDUCATION

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING from L.D.R.P. Institute of Technology and Research. 2024–2027

DIPLOMA IN COMPUTER ENGINEERING. from Government Polytechnic Porbandar. 2020–2023

## CERTIFICATIONS

- ◊ NPTEL - PYTHON FOR DATA SCIENCE.
- ◊ BASIC & ADVANCE PYTHON.