Name: Lathashree

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Profile:

Detail-oriented and motivated computer science graduate with practical experience in web development and machine learning through academic projects and internships. Skilled in developing full-stack web applications using Python, Flask, and Bootstrap, and implementing real-time AI solutions using OpenCV and TensorFlow. Comfortable working with real-time data, image, and video processing, and multi-modal input systems. Strong in problem-solving and eager to contribute to dynamic teams while continuing to learn and grow in a professional environment.

Experience

Data Science Intern

LPoint, Mangalore Oct 2024 (1 month) & Apr 2025 – Jul 2025 (3 months)

During my time at LPoint, I had the opportunity to work on a variety of real-world projects in the areas of artificial intelligence, machine learning, computer vision, and full-stack development. The internship was hands-on and exposed me to the complete project development cycle from understanding problem statements to model training, interface design, and deployment.

What I worked on:

- Built machine learning models using Python, TensorFlow, and OpenCV for tasks like face recognition, emotion detection, and spam filtering.
- Developed complete web applications using Flask, SQLite, and Bootstrap, connecting back-end ML models with a front-end UI.
- Designed real-time image/video detection systems for applications like PPE detection, number plate recognition, and traffic monitoring.
- Created interactive dashboards for data visualization and sentiment analysis, improving user interaction and data clarity.
- Worked on a multi-modal spam detection system that could analyze text, images, audio, and emails for spam.
- Participated in UI/UX enhancements, API integration, model testing, and deployment on local servers.

This internship helped me sharpen both my technical and communication skills, gave me exposure to working with real datasets, and taught me how to collaborate effectively in a fast-paced project environment.

Projects

SpamShield - Spam Detection Web Application

Tools Used: Flask, TensorFlow, NLTK, Bootstrap

Built a full-stack spam detection system that supports multiple input types including text, images, audio, and CSV files. Integrated real-time prediction functionality and a simple dashboard to visualize detection results. Focused on making the interface user-friendly and scalable.

Construction Site PPE Detection System

Tools Used: YOLOv5, OpenCV

Created a real-time detection system to identify safety gear (helmets and vests) worn by workers using object detection models. The system was tested on image and video inputs to ensure reliable detection in varied conditions.

Face Recognition Attendance System

Tools Used: OpenCV, Python, Tkinter

Developed a face-based attendance system using Haar cascade classifiers for recognition. Integrated the system with a local database to log and display attendance records through a simple desktop UI.

Emotion Detection System

Tools Used: Keras, OpenCV, Tkinter

Designed a system that detects emotions (like happy, sad, angry) in real-time from webcam feed. Used a CNN model trained on facial expression datasets and displayed results on a custom-built GUI.

Traffic Congestion Detection

Tools Used: OpenCV, Python

Worked on analyzing traffic congestion levels from video footage by detecting vehicle density on roads. Focused on practical use cases such as traffic control and city planning.

License Plate Detection System

Tools Used: OpenCV, EasyOCR

Built a solution to detect and read vehicle license plates from static images using contour detection and OCR. Useful for automating vehicle logging and entry systems.

Blood Bank Management System

Tools Used: XAMPP, MySQL, Notepad++

Designed a simple web application to manage donors, recipients, and blood stock. Used PHP and MySQL for backend operations, allowing secure data entry, editing, and tracking.

AI-Based Interactive Interview System

Tools Used: Python, OpenCV, Tkinter, Text-to-Speech, SpeechRecognition Created a prototype of a real-time interview system that could ask questions, detect the user's face and emotion, and recognize verbal answers. The system mimics a basic interview panel environment.

Water Quality Analysis

Tools Used: Google Colab, Python

Performed exploratory data analysis on water quality datasets to identify trends and detect impurity levels. Used Python libraries for data preprocessing, visualization, and correlation analysis.

Technical Skills:

Skills:

- Python
- Machine Learning
- Deep Learning
- Computer Vision
- Flask
- TensorFlow / Keras
- HTML, CSS, JavaScript

Tools

- Google Colab
- Visual Studio Code (VS Code)
- PvCharm
- MySQL Workbench
- MS Excel

- OpenCV
- TensorFlow
- Keras
- Flask

Certifications

- Data Science Foundation
- Functions in Python
- Visual Graphics in C
- Machine Learning with Python
- React Native
- Artificial Intelligence with Python Deep Neural Networks
- Participated in AWS Unleashed: Transform Your Skill with Hands-On Cloud Training Workshop

Education:

Master Of Computer Applications (2023-2025)

Visvesvaraya Technological University, Belagavi

College St Joseph Engineering College, Mangalore

Bachelor of Computer Applications (2020-2023)

Mangalore University, Mangalore Alva's College, Moodbidri

Pre-University College - EABC (2018-2020)

College Jain PU College, Moodbidri

Secondary School(2015-2018)

School Jain High School, Moodbidri

Interest & Hobbies

Reading

Drawing

Watching Tech Talks & Webinars

Languages

English

Hindi

Kannada

Tulu Konkani