Yash Karnani

Pune, Maharashtra | karnaniyash7@gmail.com | 9960133283 | linkedin/ykarnani07 | github/yashkk07

Projects

Histopathologic Oral Cancer Detection

github link

- Innovated a CNN-based model to detect oral cancer from histopathological images achieving 92.45% accuracy on test data, addressing a critical global health issue with 377,713 new OSCC cases annually.
- Optimized model performance using techniques such as dropout, batch normalization, learning rate scheduling, and early stopping, achieving a precision of 94.17%, recall of 90.76%, and an F1 score of 92.43%.
- Technologies Used:- Neural Networks, TensorFlow, CV2, Python

Dynamic Traffic Management System

github link

- Produced an intelligent system using CCTV data to optimize signal timing, **reduce congestion by 20%** and break rules by 25%, while utilizing vehicle data for road improvements and infrastructure planning.
- Coordinated a successful pilot program for emergency vehicle prioritization and a night-time safety feature to alert drivers of approaching vehicles, enhancing traffic flow and safety with real-time monitoring via a web-based interface.
- Technologies Used:- OpenCV, YOLO, Python, React, HTML5

Arrive O'Clock

github link

- Innovated features using the Google Maps API within a mobile app focused on optimizing user journeys through tailored alerts about delays—personalized solutions implemented drove engagement levels up by 30
- Integrated Llama3 to provide personalized travel tips and recommendations, enhancing user experience with relevant insights and information during their journeys resulting in a 25% improvement in overall satisfaction ratings.
- Technologies Used:- API, JavaScript, HTML5, CSS

Experience

TCD Intern, Training and Competence Development - Visakhapatnam, AP

March 2024 - Present

- Articulated 50+ programs to enhance student competencies, focusing on personal & professional development.
- Led a team of 10 interns as Campus Lead, fostering the ability to work in a team, and skill development.
- Increased social media presence from 0 to 3,000 through consistent, engaging content and stories.

AI Intern, AICTE - Online

December 2024 – January 2025

- Analyzed sales data to identify top-performing products and key customer segments, enhancing targeting strategies.
- Delivered actionable insights through advanced analytics, supporting strategic decisions, and optimizing market reach.

Java Developer Intern, Woodpecker Analytics – Pune, MH

December 2024 - January 2025

- Developed software to automate annual maintenance contract management, to reduce manual effort by 80%.
- Executed IMAP for automated email processing, ticketing and contract validation, increasing efficiency by 75%.
- Spearheaded a data science hackathon with 9,000 teams and 1 lakh prize pool, promoting innovation and collaboration.

Education

GITAM University, B.Tech in Computer Science and Engineering (IoT)

August 2022 - Present

CGPA: 8.34/10.0

Kalmadi Junior College, Intermediate

March 2022

Percentage: 66.5

Hutchings High School, ICSE

March 2020

Percentage: 96.6

Position of Responsibility

Analytics Lead, Meta Developer Circle

March 2024 - Present

- Led projects around optimizing operations and enhancing outcomes using computer vision with precision of 0.75.
- Guided 5 team members by teaching analytical concepts and coding, nurturing innovation and excellence.

Head of Logistics, Aeromodelling Club

June 2023 - December 2023

- Constructed a Thermocol hovercraft and procured the equipment for drone and aircraft parts.
- Facilitated workshops for 50+ students to construct thermocol gliders and enhance practical skills.

Skills

Tech Stack: Python, Java, SQL, C, React, HTML5, CSS, JavaScript

Technical: Data Analysis, Machine Learning, Computer Vision, Web Development

Non - Technical: Tableau, AutoCAD, Canva

Achievements

Presented research on Oral Cancer Detection using CNNs at an international conference.

January 2025

Participated in SIH '24 with a 6-member team, focusing on traffic management and light solutions.

September 2024

Stood 2nd in a 48-hour competitive coding hackathon with increasing difficulty across three rounds.

March 2024

Selected among 3000+ students for Catch Them Young at Infosys.

May 2018