

# Harshil Kothiya

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## Summary

Passionate about **data science, data analytics and visualization** with a strong interest in exploring their potential. Completed machine learning and gained foundational knowledge of neural networks and deep learning. Enthusiastic about applying analytical and visualization skills to real-world projects and continuously expanding my expertise.

## Educational Background

<b>Charotar University of Science and Technology</b> B. Tech. in Information Technology	2022 – 2025
• GPA: 9.57	
<b>Higher Secondary Education</b>	2021 – 2022
• Grade: 86.66% (PCM)	
<b>Secondary Education</b>	2019 – 2020
• Grade: 87.66%	

## Tool & Technologies

**Languages:** C, C++, Python, SQL, JavaScript, Java

**Core Subjects:** Machine Learning, Data Analysis, DSA, DBMS, OOPS

**Machine learning Libraries:** Scikit-Learn, TensorFlow, PyTorch, Streamlit

**Tools/Platforms:** Power BI

**Frontend Technology:** HTML5, CSS3, React.js, Bootstrap

**Backend Technology:** Node.js, Express.js


**Database And Testing Tools:** MongoDB, Postman

**Version control:** Git, GitHub

## Experience

<b>Full-stack developer - Intern</b> , Clumoss	May 2024 – June 2024
<ul style="list-style-type: none"><li>Developed a Hotel Management Website and an E-commerce Platform using the MERN stack.</li><li>Designed user-friendly interfaces for room booking, reservation management, and customer data handling in the hotel management system.</li><li>Built an interactive online shopping platform with seamless navigation, product pages, and secure checkout.</li><li>Worked closely with team members, ensuring smooth collaboration and effective project delivery.</li><li>Strengthened skills in team communication, problem-solving, and full-stack development.</li></ul>	

## Projects

<b>FarmSmart: Crop-Recommendation</b>	
<ul style="list-style-type: none"><li><b>Designed and developed</b> a machine learning-based crop recommendation system, analyzing Nitrogen (N), Phosphorus (P), Potassium (K), pH, and humidity to suggest optimal crops.</li><li>Integrated advanced models including Random Forest, SVM, and XGBoost to ensure high prediction accuracy, enhancing agricultural productivity and resource efficiency.</li><li><b>Built</b> an intuitive <b>Streamlit</b> web interface, allowing seamless user interaction and real-time crop recommendations based on input parameters.</li><li><b>Optimized</b> model performance through hyperparameter tuning and feature engineering, ensuring scalability and reliability across diverse environmental conditions.</li></ul>	

### Sports-Celebrity-Image-Classification



- **Developed** an image classification system leveraging Support Vector Classifier (SVC) to accurately identify sports celebrities from a diverse dataset
- **Preprocessed and augmented image data** to improve model generalization, handling variations in pose, lighting, and resolution.
- **Designed** and implemented a responsive web interface using JavaScript, enabling users to upload images and receive real-time classification results.

### Data Visualization with Power Bi



- **Designed compelling and interactive data visualizations** using Power BI to illustrate trends and patterns in crime and road accidents across India.
- **Developed** dynamic dashboards that provide comprehensive insights, enabling users to filter and drill down into region-specific data for deeper analysis

### Bangalore-Home-Price-Prediction



- **Conducted extensive data analysis** to identify key factors influencing home prices, utilizing Python libraries like Pandas, Matplotlib, and Seaborn for visualization of trends and correlations.
- **Built and fine-tuned** machine learning models (Linear Regression, Decision Trees) to predict home prices, optimizing performance through feature engineering and hyperparameter tuning.
- **Developed** an interactive UI for the home price prediction model, enabling users to input data and receive real-time predictions.

## Certifications

### NPTEL



- Completed the NPTEL exam in **Data Structures and Algorithms Using Java** with a **score of 80%**, earning a **Silver certificate with Elite honors**.
- Completed the NPTEL exam in **Database Management System** with a **score of 76%**, earning a **Silver certificate with Elite honors**.
- Earned the NPTEL certification in **Operating System Fundamentals** with **Elite honors, scoring 67%**.

The Postman API Fundamentals Student Expert Certificate and Badge.



## Achievements

- **problem-solving skills:** Solved over **350 problems on LeetCode**, demonstrating strong problem-solving skills and consistent progress
- **Academic Performance:** Achieved **1ST position** in the college rankings during the first year.
- **Hackathon:** Participating in DoseHack'24, hackathon organized by Meditab India in collaboration with CHARUSAT.