# ROHAN CHOPADE

### Education

### KIT's College Of Engineering

Kolhapur, Maharashtra

B.tech in Computer Science (Data Science)

December 2021 - Present

• Cumulative GPA: 9.2/10.0 (Till 6th Sem)

#### Technical Skills

- Languages & Frameworks: C, Python, MySQL, Flask, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, Git, GitHub, PowerBI, Robotic Process Automation (RPA).
- Machine Learning & Deep Learning: Regression, Classification, Clustering, Natural Language Processing (NLP), Neural Networks, Keras, TensorFlow.

### **Projects**

## AI-Powered Retail Assistant for T-Shirt Sales | O Source Code

| Generative AI

- Built a question-answer system for a t-shirt selling store using a SQL Database chain in Langchain.
- Utilized Google Palm LLM model for natural language understanding, Hugging Face for embeddings, and Streamlit for the user interface.

### Reddit Sentiment Analysis Using AWS Services | • Source Code

| Sentiment Analysis

• Designed a real-time sentiment analysis pipeline for Reddit comments using **AWS services** (Lambda, Kinesis Firehose, S3, Glue, Comprehend, Athena, CloudWatch) and **Power BI** for visualization, achieving 70% accuracy.

# Automatic Number Plate Recognition System | Source Code

Research Work

- Developed an ANPR system using YOLOv8 for vehicle detection and license plate localization with 98.6% accuracy, and employed SORT for tracking and ID assignment.
- Utilized ResNet-50 for character recognition (97.81% accuracy) and MySQL database for data storage.

# Walmart Sales Forecasting | Source Code

| Time Seires Analysis

- Implemented Time Series Forecasting using SMA, EMA, Holt-Winters, ARIMA, SARIMA, and Prophet.
- Conducted EDA to uncover dataset patterns and achieved: **ARIMA** (MAPE: 6.15, MdAPE: 4.72), **SARIMA** (MAPE: 4.96, MdAPE: 3.55), **Prophet** (MAPE: 3.52, MdAPE: 2.66).

# Work Experience

### Data Science Intern

June 2024 - August 2024

#### Celebal Technologies

| Remote

- Gained hands-on experience with real-world data analysis and machine learning projects.
- Built and evaluated machine learning models for various business problems.

### **Industrial Training Program**

May 2024 - August 2024

# Intel Unnati 2024

 $\mid Remote$ 

- Worked on an Automatic Number Plate Recognition (ANPR) system tailored for a college campus.
- Formulated and implemented solutions to address the problem statement provided by Intel, focusing on practical applications of computer vision, machine learning, and deep learning.

#### Publications

R. Chopade et al., "Automatic Number Plate Recognition: A Deep Dive into YOLOv8 and ResNet-50 Integration," 2024 International Conference on Integrated Circuits and Communication Systems (ICICACS), Raichur, India, 2024, pp. 1-8, doi: 10.1109/ICICACS60521.2024.10498318.

### Achievements

- Best Paper Presentation Award, 2024 IEEE 2nd International Conference on Integrated Circuits and Communication Systems (ICICACS-2024).
- Secured 1st place for three consecutive semesters in the Project-Based Learning Competitions organized by MAYURA AICTE IDEA LAB and KIT's College of Engineering (Autonomous) Kolhapur.

### Certifications

• AI & ML Workshop – Innovians Technologies

| February, 2023

• Introduction to Cyber Security - Cisco Networking Academy

| November, 2022