Ketan Eknath Pathade

+91-9404304871 |ketanpathade7@gmail.com |github.com/Ketan-cmd |linkedin.com/in/ketan-pathade

Education

VIT Bhopal University **2022 – 2026**
B.Tech in Computer Science and Engineering CGPA: 8.32/10

Skills

- **Programming:** Python, C++, SQL
- **ML & AI:** Scikit-learn, TensorFlow, PyTorch
- **Data Analysis & Visualization:** Pandas, NumPy, Matplotlib, Seaborn, Tableau, Power BI
- **Deployment:** Flask, FastAPI, Streamlit
- **Tools:** Git, Vercel, Netlify

Experience

Generative AI for Personalized E-commerce Customer Segmentation **Mar 2025 – May 2025**
Runner-up, GeeksforGeeks

- Performed detailed exploratory data analysis (EDA) on e-commerce dataset and engineered features such as total spend, order frequency, and return ratio to improve customer profiling.
- Applied K-Means clustering algorithm to segment customers into five distinct behavioral groups, providing actionable business insights.
- Leveraged OpenAI GPT API to generate personalized marketing strategies and communication for each customer segment.
- Proposed targeted actions including loyalty programs, personalized offers, and recommendations to enhance retention, engagement, and conversion rates.

Projects

Customer Churn Prediction — Python, ML, Streamlit **Jan 2025 - Feb 2025**
Predictive Modeling Project

- Performed comprehensive data preprocessing and feature engineering on telecom datasets using Pandas and NumPy to enhance model accuracy.
- Trained, tuned, and evaluated ML models (Logistic Regression, SVM) achieving 89.5% prediction accuracy and reliable real-time performance.
- Developed and deployed an interactive Streamlit web application for real-time churn prediction, with intuitive visualizations for business insights.

Pneumonia Detection Web App — AI-ML-DL Project **Oct 2024 – Dec 2024**
Healthcare AI Project

- Built a convolutional neural network using pre-trained VGG16 to classify chest X-ray images with over 90% accuracy.
- Developed a Flask-based web application enabling users to upload X-rays and receive real-time pneumonia detection results with confidence scores.
- Enhanced accessibility and usability for doctors and patients through a simple, secure, and intuitive user interface.

Lane Detection System — AI-ML-DL Project **Mar 2024 – May 2024**
Real time Lane Detection

- Implemented real-time lane detection using OpenCV with Canny edge detection and Hough Transform for robust line identification.
- Optimized system to achieve 92% lane detection accuracy at 25+ FPS on standard hardware for real-time deployment.
- Improved reliability of autonomous vehicle lane guidance under varying lighting and weather conditions.

Leadership / Achievements

- Core Member, AWS Cloud Club VIT Bhopal (2023–2024)
- LeetCode Rating: 1453 with 100+ problems solved
- Completed 100 Days of Code — 120+ DSA problems in C++, shared consistently on LinkedIn.