ABHAY RANA

+91-9368233177 ranaabhay528@gmail.com linkedin.com/in/abhay-rana Github

Summary

Machine Learning Engineer with a strong foundation in Python, SQL, Deep Learning, and OpenCV. Skilled in computer vision, building and training CNN models, and analyzing visual data to deliver accurate predictions and support AI-driven applications.

Education

Graphic Era Hill University, Dehradun **Aug 2023 – June 2025**
Master's of Computer Application *CGPA: 8.3 of 10*

Kumaon University, Haldwani **Aug 2020 – June 2023**
Bachelors of Arts

GIC Bindukhera, Haldwani **Apr 2019 – Mar 2020**
UK Board (Class XII) *70 percent*

Skills

SQL, Python, C++, ML Algorithmn, TensorFlow, Scikit-learn, Pytorch, Feature Engineering
Advanced MS Excel, Power BI, Tableau, Deep learning, pandas , numpy, keras, AWS, Streamlit, Computer Vision
Data Cleaning, Data Visualization, EDA, Problem solving, Descriptive Statistics, Git, Github, API

Projects

Smart Healthcare and Appointment System | *Python* **March 2025 – April 2025**

- **Developed a machine learning–powered healthcare platform** that predicts potential health conditions based on user-provided symptoms..
- Integrated an appointment booking module enabling patients to schedule doctor visits directly through the platform.
- Connected with MySQL for secure patient data storage and retrieval..
- Leveraged Power BI to visualize patient trends, prediction accuracy, overall platform performance..

Real-Time Digit Recognition System | *SQL, Tensor flow* **February 2025 – March 2025**

- Developed a real-time digit recognition application that captures live video input through a webcam and predicts handwritten digits using a trained Convolutional Neural Network (CNN) model.
- Preprocessed input frames with OpenCV, including grayscale conversion, resizing, and normalization to ensure accurate predictions
- Trained the CNN on the MNIST dataset, achieving high accuracy for digits 0–9.
- Designed to demonstrate the practical use of computer vision and deep learning in handwriting recognition applications such as bank cheque reading, postal code scanning, and form digitization..

Certifications

* **Data Analysis and Visualisation with power BI Certificate – Coursera (2025):** Completed 8 practical case studies involving SQL, data cleaning, dashboards, and presentations.
* **Supervised Machine Learning :Regression and classification :** Hands-on practice with ML libraries like scikit-learn, Pandas, NumPy, and Matplotlib..

Key Achievement

Flying Virus Aircraft for 45 min NCC Air Wing 'C' certificate