Apurva Belsare

Summary

Final-year AI and Data Science student with practical experience in Python, SQL, and data visualization. Completed projects in recommendation systems, leopard detection with CNNs, and gold price prediction. Ambitious and eager to apply my skills in a forward-thinking company where I can contribute and grow.

Technical Skills

Languages and DataBases: Python, SQL, MySQL

Visualization Tools: Tableau, Power BI

Other Skills: Excel, Data Analysis, Machine Learning

Projects

Product Recommendation System | Python and Data Cleaning

February 2024 - May 2024

- **Developed a recommendation system** using collaborative filtering, content-based filtering, and SVD, analyzing a dataset with **thousands of user ratings**.
- Processed a large Amazon electronics rating dataset, generating top 5 product recommendations based on user interactions and ratings.
- Successfully addressed the Cold Start Problem, improving new user engagement by recommending popular products with at least 50 ratings.

Leopard Detection Using CNNs | Python

November 2023 - March 2024

- **Developed a deep learning model** using convolutional neural networks (CNNs) to detect leopards in a dataset of **2,995 images**, including **164 leopard images**, achieving an **accuracy of 96.91%**.
- Implemented data augmentation and preprocessing techniques to enhance model training, optimizing performance with a binary cross-entropy loss function and Adam optimizer over 20 epochs.
- **Utilized Python, TensorFlow, Keras, and OpenCV** to implement and optimize the model, contributing to wildlife conservation efforts through **reliable leopard detection**.

Gold Price Prediction | Python, Data Visualization

October 2023 – November 2024

- **Developed a random forest regressor** to predict gold prices using a dataset of **2291 rows** with features like SPX, USO, SLV, and EUR/USD, achieving an **R^2 score of 0.98**.
- **Created visualizations** to illustrate model predictions and trends, enhancing the interpretation of gold price movements and supporting data-driven insights.

Courses

- The Complete Python Bootcamp From Zero to Hero Python (Udemy)
- SQL Essential Training (LinkedIn Learning)
- · Power BI Essential Training (LinkedIn Learning)

Education

Vishwakarma Institute of Information Technology

Dec 2021-Present

Bachelor of Technology in Artificial Intelligence and Data Science

Pune, Maharashtra

CGPA: 8.93

 $11^{th} - 12^{th}$

10th

Harikisan Maloo International School

July 2019- Aug 2021

12th Percentage – 96.83%

Amravati, Maharashtra

School of Scholars

July 2018- May 2019

10th Percentage – 84.6%

Amravati. Maharashtra