KARTIKEY SHARMA

+91 8595934507 | kartikey30sharma@gmail.com
New Delhi, India
DataCamp | linkedin.com/in/kartikeysharma30 | GitHub

Summary

Graduate in Artificial Intelligence and Machine Learning, I possess a solid foundation in Data Analysis and Data Visualisation. I am proficient in Python, Tableau, SQL, and a wide range of analytical libraries that facilitate the extraction of actionable insights from complex datasets. With hands-on experience in machine learning projects and adept at gathering and transforming data, I am passionate about leveraging data to drive informed decisions. Seeking roles in Data Analytics or Machine Learning where I can apply my technical skills and contribute to impactful solutions.

Skills

Language & Skills : Python, Data Analytics(ETL, EDA, Data Manipulation) & Data Visualisation, Machine learning, SQL, Object Oriented Programming, Data Structures & Algorithms, Advance Excel, Power Query.

Tools : Tableau, MS Excel, MySQL, Google Colab, Jupyter Notebook

Libraries : Numpy, Pandas, Matplotlib, Seaborn, Requests, Tkinter, Scikit-learn, OpenCV, Tensorflow, Sql-Connector

Soft Skills : Problem-Solving , Adaptability , Creativity , Teamwork

Experience

Prodigal AI - Project Intern   Sep 2024 - Dec 2024

- Developed a backtesting engine for Stock AI Trader to simulate, analyse and evaluate investment strategies like Bollinger Bands and SMA Crossover with multiple option of investment styles - Aggressive, Moderate, Passive using historical data .
- Built an interactive dashboard with Streamlit and Plotly for real-time visualisation of trading metrics, including buy/sell signals and ROI for each specific strategy and investment style applied.
- Integrated Yahoo Finance API for efficient financial data retrieval and built a scalable architecture for strategy experimentation.
- Delivered actionable insights on strategy performance and risk-adjusted returns to enhance data-driven decision-making.
- **Tech Stack : yfinance , Streamlit , Plotly**

Projects

SEC-Edgar Financial Report Analysis & Q&A RAG Agent :

- Developed a RAG system to analyze SEC 10-K filings from major tech companies (Google, Microsoft, NVIDIA) for 2022-2024, enabling financial data extraction and insightful Q&A.
- Implemented document loading, chunking, and embedding with langchain and SentenceTransformerEmbeddings, and stored data in a Qdrant vector database.
- Utilized MultiQueryRetriever for complex query decomposition and ChatGoogleGenerativeAI to synthesize accurate, comparative financial analysis and answers on metrics like revenue and margins.
- **Tech Stack: Langchain , Edgartools, Qdrant(VectorDB), Google Gemini**   (Project)

Traffic Sign Detection & Compliance System   :

- Developed an Object detection system using YOLOv8m, thereby improving mAP@50 from 95.6% to 97.5% for identifying and classifying traffic signs from real-world videos feed for autonomous and semi-autonomous driving support ensuring safe and reliable on road ecosystem.
- Using a custom dataset from Kaggle which is associated with Roboflow for getting image label annotations for training and validating images during the training process.
- Integrated real-time inference(in voice alerts) and visualisation, including video processing with OpenCV and PIL, along with performance evaluation and result demonstration through annotated video output.
- **Tech Stack: YOLO-v8, OpenCV, Pandas, Matplotlib, Moviepy(for Alerts)**   (Project)

Customer Churn Analysis   :

- Conducted comprehensive churn analysis to identify key drivers of customer attrition, including geographic patterns and various churn rate KPIs and built dashboards over these.
- Segmented churn data by age groups to uncover demographic trends influencing customer retention.
- Evaluated churn rates across payment methods and subscription plans to inform strategic improvements in pricing and payment offerings.
- **Tech Stack: Tableau**   (Project)

Education

University School of Automation and Robotics - GGSIPU, New Delhi   Dec 2021 - May 2025

  B-Tech : **Artificial Intelligence and Machine Learning**

  CGPA : **8.359**

  Relevant Coursework : Linear Algebra , Theory Of Computation , Data Structures & Algorithms , Artificial Intelligence , Machine Learning , Computer Vision , Natural Language Processing , Predictive Analytics , Neural Networks , Deep Learning , Reinforcement Learning .

Air Force Golden Jubilee Institute , Subroto Park , New Delhi

  Senior Secondary (XII) , Science (PCM + CS)   May 2021

    Percentage - 81.2%

  Secondary (X)   May 2019

    Percentage - 79.2%

Certifications & Courses

DataCamp   :   (Portfolio)

- Data Analysis
  - Python
  - Excel
  - Tableau
  - SQL/PostgreSQL

LinkedIn & Microsoft :

- Career Essentials in Generative AI by Microsoft and LinkedIn   (Certificate)
- Career Essentials in Data Analysis by Microsoft and LinkedIn   (Certificate)

Oracle :

- Oracle OCI 2023 AI Foundation Associate   (Certificate)

Coding Ninjas :

- Introduction to Python Programming   (Certificate)
- Data Structures & Algorithms   (Certificate)

Courses :

  CS50P(Python) , CS50x(Computer Science), CS50AI(Artificial Intelligence with Python) , Communication Masterclass(Think School)