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"Aspiring Data Scientist | Skilled in Python, Machine Learning"

SUMMARY

Data Science Aspirant with expertise in Python, machine learning, and AI, backed by hands-on experience in robotics, backend development, and real-world data-driven projects. Proficient in tools and frameworks such as Pandas, MongoDB, OpenCV, and Streamlit, with a strong ability to translate complex data into actionable insights and deploy intelligent solutions.

SKILLS

Programming Languages:
Python, C, SQL, HTML, CSS,JS

Data Science & Analysis:
Pandas, NumPy, Power BI, Microsoft Excel, OpenCV, Mediapipe,tensorflow,Django,Streamlit

Databases:
MySQL, MongoDB

Tools & Platforms:
Visual Studio Code, Jupyter Notebook, Raspberry Pi

Other
Automation (GPIO), Data Visualization, API Integration

PROJECT

Real-Time Plant Disease Detection using YOLOv5   **Jan 2025 – Feb 2025**
- Designed and implemented a data-driven object detection system to identify tomato plant diseases using YOLOv5.
- Performed data preprocessing, annotation conversion, and augmentation to improve model robustness.
- Evaluated model performance using metrics like mAP and IoU, and fine-tuned hyperparameters for optimized results.
- Applied computer vision techniques to support precision agriculture, improving early diagnosis and crop health monitoring.

Key Skills: Python, PyTorch, YOLOv5, OpenCV, Data Augmentation, Model Evaluation

Earthquake Data Analysis and Visualization   **Dec 2024 – Jan 2025**
- Analyzed global earthquake datasets to uncover trends in magnitude, depth, and frequency using Pandas and NumPy.
- Built interactive data visualizations and geospatial maps using Plotly, Seaborn, and Folium to highlight seismic hotspots.
- Applied clustering algorithms (e.g., K-Means) to detect regions of concentrated seismic activity.
- Deployed the analysis as an interactive Streamlit web app for real-time exploration and user engagement.

Key Skills: Python, Pandas, Seaborn, Plotly, Folium, K-Means Clustering, Streamlit, EDA

Experience

Data Analyst (Part-Time)
GeoSavvy — Jun 2024 – Present
- Analyzed large-scale environmental and sensor datasets to extract actionable insights for geospatial intelligence applications.
- Built interactive dashboards and automated reports using Python (Pandas, Matplotlib, Seaborn) to support decision-making.
- Collaborated with cross-functional teams to preprocess and clean raw data for modeling and visualization tasks.

- Streamlined data workflows and improved data accuracy, reducing processing time by 30%.

Key Tools: Python, Pandas, NumPy, Seaborn, Excel, Streamlit, Jupyter

Mini Project

Ambulance detection using image processing | **Github**
- Due to heavy traffic Some time a ambulance was stuck in a traffic in emergency time
- To avoid that I create a project project using computer vision (Image Processing) to detect a ambulance and trigger a alert in traffic signal

EDUCATION

Francis Xavier Engineering College- Tirunelveli. (2022-PRESENT)

IRT Polytechnic College – Tirunelveli.(2018-2022)