BABAJI B

B.Tech Mechanical | St Martins Engineering College, Secunderabad
Hyderabad, Telangana

☎ +919618485239
✉ byribabajimudhiraj@gmail.com
in www.linkedin.com/in/babajimudhiraj

WORK EXPERIENCE

Data Science Intern | ProITBridge PVT LTD, Bangalore   **July 2024 - Present**

• Developed a SQL-driven price monitoring system using Python, MySQL, and APIs to track price violations across marketplaces. Implemented dynamic query-based processing and real-time exchange rate conversion, enabling accurate violation detection and Tracking.

• Designed a Quality Check System integrating the YOLO object detection model for automated defect detection in metal plates.

• Built a resume classification system using a large language model (LLM) to extract skills and classify resumes according to skill set, reducing the manual HR screening time by 40

• Engineered and fine-tuned machine learning models for tasks such as classification, regression, clustering, and recommendation systems, enhancing model accuracy through feature selection and hyperparameter tuning.

• Performed feature engineering on raw datasets, identifying key attributes that enhanced model performance and predictive accuracy

PROJECTS

Minimum Advertised Price (MAP) Monitoring System   **Aug 2024 – Sep 2024**

• Designed a dynamic SQL-based system to process seller data, compare advertised prices with threshold values and store violations in a monitoring table.

• Implemented real-time exchange rate conversion to handle regional pricing using API integration and cachingtechniques.

• Developed a rule-based violation detection mechanism: If a seller's advertised price falls below the Minimum Advertised Price (MAP) set by the product owner or brand owner, it is flagged as a violation.

• Identified fraudulent sellers using alias names, fake store names, and multiple marketplace accounts to bypass MAP policies.

• Optimized data handling by dynamically selecting seller tables based on input dates, improving tracking efficiency

• Aggregated violations per Region and Subcategory, enabling early detection of high-risk sellers and ensuring effective policy enforcement.

Fraud Detection Using Autoencoders   **Oct 2024 – Nov 2024**

• Developed an Autoencoder-based fraud detection model to identify fraudulent credit card transactions.

• Trained a deep learning model to learn normal transaction patterns and detect anomalies.

• Used Mean Squared Error (MSE) reconstruction loss to flag suspicious transactions.

• Achieved high recall and precision in detecting fraudulent activities.

• Evaluated the model using AUC-ROC, precision, recall, and F1 score for accurate fraud detection.

Hole Detection in Metal Parts Using YOLO Model   **Dec 2024 – Jan 2025**

• Build a computer vision solution for industrial defect detection using YOLO object detection, focusing on real-time processing.

• Curated and annotated a custom data and increased the size of data by using augmentation techniques to train and validate the model, emphasizing robustness in varying lighting and material conditions.

• Optimized pre-processing techniques to boost model performance and exported results in JSON format

Resume Classification Using NLP   **Feb 2025 – Mar 2025**

• Developed a Resume Classification System utilizing a Large Language Model (LLM) to extract skills and classify resumes based on skill sets, reducing manual HR screening time by 40

• Extracted text, data cleaning, EDA, and visualization to improve classification accuracy.

• Applied NLP techniques like tokenization, lemmatization, and POS tagging for preprocessing.

• Developed an interactive Streamlit-based UI for resume classification.

EDUCATION

B.E. Mechanical Engineering St.Martin's Engineering College, Hyderabad (2021–2024)

COURSEWORK / SKILLS

- Python
- OOPS Concepts
- Statistics
- Data Analysis
- Data Visualization
- SQL
- Machine Learning
- Deep Learning
- Computer vision
- NLP

TECHNICAL SKILLS

Languages: Python, SQL
Technologies/Frameworks: Pandas, NumPy, Seaborn, Matplotlib, Streamlit, Flask, Beautiful Soup, Scikit-learn, TensorFlow, Keras, NLTK
Developer Tools: VS Code, Google Colab, Jupyter notebook, Spyder

SOFT SKILLS

- Problem-Solving, Analytical Thinking, Communication, Team Collaboration, Time Management

ACHIEVEMENTS

- Presented a paper on "Intelligent Autonomous Six-Legged Robot" at college-level conference hosted by St. Martin's Engineering College, highlighting innovations in robotics and autonomous mobility.

DECLARATION

- This resume truthfully reflects my qualifications and experience.