Rajkumar Vijay

Machine Learning Engineer

✉ raj_amudha07@yahoo.co.in 📞 9962480101 📍 Chennai, India 🔗 Linkedin ⬤ GitHub

Objective

Certified Data Scientist with hands-on experience in statistical modeling, data mining, and programming. Proficient in Python, SQL, and machine learning frameworks. Eager to leverage academic knowledge and project experience to contribute to impactful data science initiatives.

Skills

Programming:
Python, NumPy, Pandas, SQL, MongoDB.

Visualization:
Matplotlib, Seaborn, Plotly, Streamlit.

Business Intelligence:
Tableau, Microsoft Power BI.

Machine Learning:
Scikit-learn, Ensemble Techniques, EDA, Data Preprocessing, Decision Tree.

Advanced Techniques:
GridSearchCV, Hyperparameter Tuning, Feature Engineering.

Projects

Predicting Breast Cancer, Key Skills: Python, Pandas, EDA, Numpy, Seaborn, Ensemble Techniques.
- **Problem Statement**: Early detection of breast cancer is crucial to improving patient outcomes.
- **Aim**: To develop a reliable machine learning model for predicting breast cancer.
- Processed a dataset with over 500 records, achieving a 92% accuracy using Random Forest Classifier.
- Reduced feature dimensionality by 30%, improving training efficiency.
- Visualized insights using Matplotlib and Seaborn, aiding in feature importance analysis.

BizCard: Business Card Data Extraction, Key Skills: EasyOCR, Streamlit GUI, SQL, Data Extraction.
- **Problem Statement**: Manual extraction of contact details from business cards is time-consuming and error-prone.
- **Aim**: To automate the extraction of business card details using OCR.
- Achieved 95% OCR accuracy on a dataset of 1,000+ business cards using Streamlit and EasyOCR.
- Reduced processing time by 20% through caching mechanisms, enhancing user experience.
- Successfully stored and retrieved over 1,500 entries in a MySQL database with CRUD (Create, Read, Update, Delete) operations.

PhonePe Pulse Data Visualization, Key Skills: GitHub Cloning, Python, Pandas, MySQL, Streamlit, and Plotly.
- **Problem Statement**: Analyzing large-scale digital payment data is challenging without a proper visualization tool.
- **Aim**: To create an interactive dashboard for exploring PhonePe transaction data.
- Processed and stored 20 billion transaction records, ensuring efficient retrieval.
- Built a geo-visualization dashboard that enabled real-time insights for fintech professionals.
- Improved data processing time by 25% through optimized Python scripts and MySQL indexing.

Airbnb Data Analysis, Key Skills: Python scripting, Data Preprocessing, Visualization, EDA, Streamlit, MongoDB.
- **Problem Statement**: Understanding trends and patterns in Airbnb listings requires advanced analysis tools.
- **Aim**: To enable exploratory analysis of Airbnb data through a user-friendly application.
- Analyzed over 10,000 Airbnb listings, identifying pricing trends and seasonal booking patterns.
- Created geospatial heatmaps with Plotly, highlighting dense listing areas across 20+ countries.
- Reduced data cleaning time by 40% through automated preprocessing pipelines.

Professional Experience

07/2017 – 02/2024 Chennai, India	**Group Coordinator,** Zenmed Private Solutions • Led operations in healthcare insurance claims, optimizing workflows. • Streamlined insurance resolution processes and ensured compliance.
08/2015 – 06/2017 Chennai, India	**Sr. Accounts Receivable,** First Source Private Limited • Managed account receivables and customer relations to improve recovery rates.
06/2014 – 08/2015 Chennai, India	**Sr. Accounts Receivable,** Technosoft Private Limited • Communicated with clients to resolve billing discrepancies and ensure accuracy.
02/2013 – 06/2014 Chennai, India	**Accounts Receivable,** Omega Healthcare • Processed and monitored insurance claims to minimize outstanding accounts.

Education

Chennai, India	**Certified Advanced Programming Professional & Master Data Science,** GUVI IIT-M
2004 – 2007 Chennai, India	**Bachelor of Computer Application,** SRM Arts and Science College