SAI BABU PATARLAPALLI

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Objective

- Motivated graduating Data Scientist with 3+ years of work experience in Data Analysis.
- Agile & adaptable to changing business needs, with a proven record of delivering in fast-paced environments.
- Intellectually curious graduate student with a penchant for using technology to solve real-world problems.

WORK EXPERIENCE

Clarkson University- Graduate Assistant- Potsdam, USA *August 2023 – Present*

- Designed and developed a comprehensive database from unstructured raw data, encompassing the creation of robust entity-relationship diagrams (ERD) to model database schemas effectively. Utilized MySQL for database management, ensuring data integrity and establishing relational schematics to support complex data queries and analysis.
- This project demonstrated my proficiency in database architecture and my ability to transform raw data into a structured, query able repository, suitable for various analytical applications and client-user-friendly.

Tata Technologies Limited - Data Analyst - India *March 2022 – July 2023*

- Implemented to analyze and investigate the car sub-system level data and use this data to derive meaningful insights using visualizations.
- Completely reviewed and analyzed testing data using internal data analytics and visualization tools analyzing 150+ driving scenarios per day to identify problematic areas in the electric driving vehicle.
- Developed automated reporting systems using Python and SQL aiming to reduce human error and improve efficiency in data handling. Collaborating with service teams for troubleshooting in customer quality issues.
- Designed dynamic currency conversion and performed interactive marketing analysis using tableau. Analyzed, engineered, and refactored frequent data-fetching SQL queries by performance tuning which improved the Efficiency by 12.
- Collaborating in different technical discussions for improving productivity.

Amara Raja Batteries Limited - Junior Data Analyst- India *April 2021 – February 2022*

- Utilized data analysis techniques to identify key trends and insights, resulting in an increase in efficiency of the product.
- Conducted exploratory data analysis on a database, key segments resulting and benchmarking to release a product in the market.
- Developed a dashboard on new product development of a product sales, service feedback.
- Conducting product reviews with sales and marketing team for improving the new product efficiency.

Panther MotoCorp Limited- Engineer Trainee – India *November 2019 – March 2021*

- Conducted comprehensive EDA to derive actionable insights from large datasets, Focused on understanding data patterns and trends for informed decision-making.
- Following up with different vendors for data collections and around the world for better project management and data management.
- Prepared dashboards using calculated fields for different logics for trends, parameters, calculations, groups, sets and Hierarchies in Tableau.

PROJECTS

Exploring the End-to-End Process of Fire Weather Index Prediction Machine Learning Project.

- Implemented tools: Model Evaluation, Data Preprocessing, Machine Learning Model Development.
- Developed a model to predict the fire weather index using a dataset from two regions of Algeria: Bejaia in the northeast and Sidi Bel-abbes in the northwest. Accurate fire weather index prediction is crucial for assessing wildfire risk and severity. By forecasting the fire weather index, we can enhance preparedness, minimize damage, and protect lives.

Exploratory Data Analysis of US Accidents data set.

- Using Python based Exploratory Data Analysis on "US Accidents" dataset to find out and visualize different trends. Also included impact of COVID-19 on traffic behavior and accidents, environmental stimuli on accident occurrence and accident hotspot locations to get control over the same.

EDUCATION

Clarkson University, Potsdam, New York, USA *August 2023 – December 2024*

Master of Science in Data Science.

- ✓ **Courses:** Probability and Statistics for Data Science, Machine Learning, Big Data, Deep Learning.
- ✓ **Graduate Assistant:** Information Systems

Godavari Institute of Engineering and Technology, India. *July 2015 – March 2019*

Bachelor of Technology in Mechanical Engineering.

SKILLS

SQL - HiveQL, Oracle, SQL Server, MySQL, PostgreSQL.

Python - Pandas, Plotly, Scikit-learn, Scikit-tda, Flask, Openpyxl, Numpy, Matplotlib**,** PySpark, Jupyter notebook.

Analysis - Regression Analysis, Machine Learning, Topological Data Analysis, Statistical Analysis.

Machine learning - Supervised Learning, Unsupervised Learning, Natural Language Processing (NLP), Feature engineering.

Visualizations - R-Programming, Tableau and Power BI.