BHAVANA SRIHARSHITHA ABBINA

harshi.abbina986@gmail.com | +1 (659)-253-9885 | Birmingham, AL

EDUCATION:

Masters in Data Science | University of Alabama at Birmingham | January 2023-May 2024
GPA:4.0
Course Works: Advance Algorithms, Matrix Algorithms, Machine Learning, Data base Management,
Cloud computing

PROFESSIONAL EXPERIENCE:

Trainee
Mindtree Ltd | February 2021 - July 2021
- Mastered SQL and Python, optimizing data queries and automation scripts for complex data analysis and manipulation in a high-volume data environment.
- Developed predictive models using scikit-learn and applying machine learning techniques to derive insights and solve critical industry problems efficiently.
- Advanced proficiency in data visualization, utilizing PowerBI to construct dynamic, interactive dashboards that provided stakeholders with clear, digestible data insights.
- Implemented rigorous statistical analysis using Python for hypothesis testing to validate model assumptions and enhance the accuracy and integrity of predictive models.

Data Analyst
Mindtree Ltd | August 2021 - December 2022
Starr Insurance (P&C Insurance), BFSI Domain
- Directed data cleansing initiatives, utilizing scripts to extract, standardize, and deduplicate data from servers, thereby boosting data quality and ensuring the dependability of reports for informed decision-making.
- Formulated and managed the creation of dynamic reports and dashboards with Power BI, furnishing stakeholders with instant insights into insurance policy statuses and coverage details; led to a 30% decrease in policy processing time.
- Continuously enhanced dashboard functionality and design to align with evolving business requirements, ensuring optimal representation of strategic and operational metrics.

SKILLS:

Programming Languages: C++, Python, SQL
Tools: Microsoft Excel, Power BI
Databases: MySQL, PostgreSQL
Python Libraries: Pandas, Numpy, Sklearn
Visualization Libraries: Matplotlib, Seaborn
Cloud AWS (EC2, S3), Data Analysis Statistics (Descriptive, Inferential (Hypothesis Testing)),
Exploratory Data Analysis (EDA), Predictive Modelling techniques.

PROJECTS:

Ecommerce Sales Data Analysis
Independent Project

Data Cleansing: Conducted thorough data cleansing to ensure the accuracy and consistency of the ecommerce sales dataset, addressing issues such as missing values and data anomalies.
Data Analysis: Leveraged advanced Excel functionalities, including pivot tables and complex formulas, to perform detailed analysis of sales data and identify key performance indicators (KPIs) and trends.
Dashboard Development: Designed and developed an interactive sales analysis dashboard in Excel, featuring:
Sales and Profit Analysis: Created monthly trend charts to visualize the sum of sales and profit, providing insights into seasonal trends and performance fluctuations.
Category-wise Profit Analysis: Developed bar charts to illustrate profit distribution across different product categories, aiding in category performance evaluation.
Geographic Sales Analysis: Utilized a heatmap to represent sales distribution across various states, highlighting regional performance variations.
Top Performing Subcategories: Compiled bar charts showcasing the top-performing subcategories, facilitating targeted marketing and inventory decisions.
Sales Percentage Breakdown: Designed pie charts to display the sales percentage of each product category, offering a clear view of category contributions.
Dynamic Filtering: Implemented interactive filters for year, region, and segment, enabling users to explore data subsets and gain deeper insights.
KPI Development: Formulated key performance indicators such as year-over-year (YoY) growth for sales, profit, quantity, number of orders, and profit margin to measure business performance.
Reporting: Generated comprehensive and visually appealing reports to communicate insights into sales patterns and business performance, supporting strategic decision-making and optimization efforts.

Financial Loan Data Analysis
Independent Project

Data Cleansing: Conducted thorough data cleansing to ensure the accuracy and consistency of the ecommerce sales dataset, addressing issues such as missing values and data anomalies.
Data Analysis: Leveraged advanced DAX, to perform detailed analysis of sales data and identify key performance indicators (KPIs) and trends.
Power BI Visualization: Developed interactive visualizations using Power BI, comprising three detailed dashboards:
Summary Dashboard:
Displayed key metrics: total loan applications (38.6K), total funded amount ($435.8M), total payment amount ($473.1M), average interest rate (12.0%), and average debt-to-income (DTI) ratio (13.3%).
Highlighted good vs. bad loan statistics, showing 86.18% good loans and 13.82% bad loans.
Included month over month(MoM) growth metrics for comprehensive performance tracking.
Overview Dashboard:
Visualized loan details filtered by state, grade, and purpose of loan.
Showcased total funded amount by month, state, employee length, purpose, term, and home ownership status.
Enabled dynamic filtering for in-depth data exploration and analysis.

Details Dashboard:
Provided detailed customer information, including loan purpose, home ownership, grade, sub-grade, issue date, total funded amount, average interest rate, installment sum, and total payment amount.
Allowed users to drill down into individual loan and customer details for thorough review.
SQL Testing: Tested all metrics using SQL queries written in MySQL to ensure data accuracy and reliability.
Reporting and Insights: Generated detailed reports to provide actionable insights into loan performance, customer demographics, and repayment behavior, aiding strategic decision-making.