SHUBHAM GOYAL

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<u>LinkedIn | GitHub</u> <u>Portfolio</u>

EDUCATION

Bhagwan Parshuram Institute of Technology

B-Tech, Electrical and Electronics Engineering

SKILLS

Analytical Tools:Programming Languages:Database:Machine LearningPower BiSQL (Structured Query Language)MySQLSupervised and Unsupervised LearningExcelPythonHypothesis TestingTableauTime Series AnalysisNatural Language Processing (NLP)

PROJECTS

Spam Detection Link

- Built a spam detection model using NLP, classifying messages as ham or spam.
- Tested multiple classifiers, with SVC achieving 98% accuracy and a 1.0 precision score.
- Implemented preprocessing techniques to improve text classification performance.

Ecommerce Product Categorization (Data Science Hackathon)

<u>Link</u>

- Developed a text classification model to accurately categorize eCommerce products based on product descriptions.
- Applied NLP techniques such as TF-IDF and word embeddings for feature engineering and improved categorization accuracy.
- Built and fine-tuned machine learning models, optimizing hyperparameters to enhance precision, recall, and F1 score.
- Presented findings through data visualizations (word clouds, category distributions) and a structured Jupyter Notebook.

Virgin Airlines (Sentiment Analysis)

<u>Link</u>

- Developed a tweet sentiment classification model to analyze customer perceptions of Virgin Airlines on social media.
- Tested Logistic Regression, MultinomialNB, Random Forest, and SVC, with Logistic Regression achieving best accuracy of 84%
- Created a word frequency chart to visualize the most commonly used words in positive and negative tweets.

Market Basket Analysis for Wallkart

Link

- Analyzed transaction data to identify frequently bought-together items and optimize product placement.
- Discovered key product combinations, such as **rolls/buns & whole milk, yogurt & whole milk, and soda & vegetables**, to enhance visibility and sales.
- Identified most frequently purchased items & customer purchase patterns by day, aiding in better inventory & marketing strategies.

Hypothesis Testing (Ad Performance Analysis: Facebook vs. AdWords)

<u>Link</u>

- Compared Facebook and AdWords ad campaigns based on clicks, conversions, and cost-effectiveness to optimize ROI.
- Identified a stable and proportional relationship between ad spend and conversions, demonstrating long-term effectiveness.
- Highlighted influence of external factors like market conditions & audience behavior, emphasizing need for deeper validation

Time series forecasting (Netflix Stock Price Time Series Analysis)

<u>Link</u>

- Analyzed Netflix stock prices (2018–2022) using various time series models to predict future stock trends.
- Evaluated MA, ARMA, ARIMA, SARIMA, and Smoothing models, with Double Exponential Smoothing achieving the lowest RMSE of **9.81.**
- Provided insights into stock price patterns and volatility, aiding in better financial forecasting.

IPL insight [Power BI | SQL]

<u>Link</u>

- Developed an interactive dashboard for a sports magazine analyzing three years of IPL data to evaluate batter bowler performance and overall team statistics.
- Provided comprehensive player insights by tracking metrics such purple cap and orange cap winners, match details, and win counts, enhancing editorial content and strategic sports analysis.
- Help to identify trends and patterns in players and team performances, offering valuable insights for editorial content.

Hospitality Domain [Power BI | SQL]

Link

Mumbai city has generated highest revenue 39%, while Delhi has highest occupancy rate 26% and cancellation rate 25%

- Weekdays generated nearly 2 times revenue than weekends.
- Atlig Exotica accounted for 18.7% of total revenue, making it the highest revenue generating hotel.
- Highest numbers of booking done from Other platform (41%) followed by MakeMyTrip (20%).

FMCG Domain [SQL | Power Point]

Link Feb 2024

- Presented Insights on ad-hoc business requests, by querying the million rows database using SQL. Designed a Power Bi dashboard to understand sales.
- Revenue increased by more than 2x in both campaigns while the units sold was 4x in Diwali and 2x in Sankranti sales.
- **500 Cashbacks** outperform in Diwali campaign and **BOGOF** outperform in Sankranti campaign. **25%** Off and **50%** Off discounts underperform in both campaigns.

INTERNSHIP

Med Tour Easy

- Analysed a cosmetics dataset using Python (Pandas, NumPy, scikit-learn) to uncover insights.
- Applied t-SNE for dimensionality reduction and used Bokeh for interactive data visualization.

4-Week Virtual Internship | AtliQ Technologies

May 2024

- Conducted data cleaning, transformation, and visualization tasks to support business decision making process.
- Assisted in developing interactive dashboards and reports, contributing to strategic business insights.
- Created presentations to communicate analytical findings & insights to stakeholders, enhancing data-driven decision making.

EXPERIENCE

Collegetravellers (Co-Founder)

Link 2020-2022

- Orchestrating over 20 trips, fostering memorable experiences, and cultivating a vibrant community of travelers.
- Managed logistics, Marketing, and Customer relations, ensuring high satisfaction and repeat business.

Delhi NCR Memes

Link 2018-2022

- Managed Instagram page with over 16000 followers, curating content and engaging with followers to drive growth.
- > Developed and executed content strategies, increasing followers' engagement and page visibility.