Manjit Singh

Tezpur, Assam, IN | itsmanjit20@gmail.com | +91 6900054576 | Portfolio | LinkedIn | GitHub

EDUCATION

Executive Post Graduate Programme in Data Science & AI — Oct '23 - Jan '25

IIIT Bangalore — Bengaluru, IN

Bachelor of Commerce - B. Com — Jul '20 - Jun '23

Gauhati University — Guwahati, Assam, IN

TECHNICAL SKILLS

Programming & Tools: Python, SQL, Power BI, Tableau, MS Excel, GIT/GitHub, Jupyter Notebooks

Frameworks & Libraries: NumPy, Pandas, Scikit-Learn, Matplotlib, SciPy, NLTK, TensorFlow, PyTorch, Keras

Database Systems: MySQL, PostgreSQL, MongoDB

Data Science Skills: Machine Learning Algorithms, NLP, Deep Learning, Artificial Intelligence, Statistical Analysis, ML frameworks, Data Cleaning & Wrangling, Data Visualization

Business Skills: Market Research & Analysis, Business Acumen, Version Control, Reporting, Problem Solving, Business Intelligence

PROJECTS

Automatic Ticket Classification | Tech Stack: Python, NMF

- Developed models **(Logistic Regression, Random Forest, Naive Bayes)** using **Scikit-learn** to classify support tickets based on text data.
- Used **Non-Negative Matrix Factorization (NMF)** for topic extraction from unstructured text, improving model interpretability.
- Conducted hyperparameter tuning with **GridSearchCV** to improve performance, achieving **92.4% accuracy** and **0.99 ROC AUC** on validation data.

(GITHUB LINK)

Customer Segmentation using Clustering Techniques | Tech Stack: Python

- Applied **K-Means and Hierarchical Clustering** using **Scikit-learn** to segment customers based on **RFM analysis** (recency, frequency, monetary value).
- Evaluated clustering quality with **silhouette analysis** and optimized the number of clusters using the **elbow method**.
- Achieved a **silhouette score of 0.48** and gained insights into customer behavior and identified potential strategies for targeted marketing.

(GITHUB LINK)

Telecom Customer Churn Prediction | Tech Stack: Python, PCA

- Built **Logistic Regression and Random Forest models** to predict customer churn, addressing **class imbalance** using **SMOTE**.
- Reduced dimensionality with **PCA**, fine-tuned hyperparameters using **GridSearchCV**, and validated models with **StratifiedKFold cross-validation**.
- Achieved **83% accuracy** and **0.88 ROC AUC**, demonstrating the ability to build predictive models with actionable insights.

(GIITHUB LINK)

Vehicle EDA Analysis and Optimization | Tech Stack: Python

- Performed **Exploratory Data Analysis (EDA)** to analyze vehicle performance metrics such as fuel consumption, engine health and driver behavior.
- **Engineered features** and conducted **correlation analysis** to identify patterns affecting efficiency and maintenance.
- Provided recommendations for **speed management** and **fuel optimization**, illustrating potential improvements in fleet management.

(GITHUB LINK)

PROFESSIONAL EXPERIENCE

Business Analyst — Feb '24 - May '24

Quest Global Technologies Ltd — Remote

- Developed **automated dashboards** using **Power BI** and **SQL**, improving **operational efficiency by 10%** and enabling real-time KPI tracking for stakeholders
- Led **A/B testing** of marketing strategies using **Python**, achieving a **12% improvement** in conversion rates by optimizing campaign targeting
- Built **predictive models** to forecast customer behavior, collaborating with product teams to design personalized engagement strategies
- Created **custom KPI visualizations** and automated reporting pipelines, enhancing monitoring efficiency by **20%** through SQL-based automation

Business Analyst Intern — Nov '23 - Feb '24

Quest Global Technologies Ltd — Remote

- Discovered **5** new business opportunities in the **GCC region** by performing market trend analysis using **Power BI** and **SQL** on public datasets
- Boosted **ROI by 15%** by generating **EDA-driven recommendations** and actionable insights, aligning strategies with business goals
- Applied **K-Means clustering** for segmentation analysis, improving **conversion rates by 15%** for targeted high-value customers
- Improved **data pipeline efficiency by 10%** by automating **data cleaning** workflows to enhance data quality