ROHAN SINGH

ronsingh0098@gmail.com | 857-384-1557 | LinkedIn | Portfolio | Boston, MA

EDUCATION

Boston University - Masters of Science in Applied Data Analytics 01/2025

M.P.S.T.M.E, NMIMS - MBA in Operations and Supply Chain Management 07/2020 - 05/2022

M.P.S.T.M.E, NMIMS - Bachelors of Science in Information Technology 04/2016 – 03/2020

SKILLS

Software Tools: Power BI, Tableau, Microsoft Excel, Looker, Apache Superset, Jupyter Notebooks, AWS Sagemaker, AWS S3, Databricks, Google BigQuery, Docker, Kubernetes, Azure DevOps, GitHub, Jenkins, Linux, SAP ERP, Oracle ERP.
Programming Languages: Python, R, SQL, JavaScript, HTML, CSS, C, C++, MySQL, MongoDB, Microsoft SQL Server.
Frameworks: Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, TensorFlow, Keras, PyTorch, Flask, Dash, Plotly, PyTest, MATLAB.
Statistical Analysis: Statsmodels, Bayesian Statistics, Hypothesis Testing, Inferential and Descriptive Statistics.
Financial Modelling & Analysis: Sharpe Ratio, Value at Risk (VaR), Monte Carlo Simulations, Modern Portfolio Theory.
Additional Skills: Machine Learning, Design Thinking, Geospatial Analysis, Predictive Analytics and Modeling, Agile Methodologies.

WORK EXPERIENCE

Boston While Black| Data Analyst May 2024 - Aug 2024

- Built web applications using Python to streamline workflows for data analysis processes, **reducing data retrieval time by 50%** and significantly enhancing the organization's ability to monitor member engagement and retention in real time.
- Implemented **AutoML** systems using **Amazon SageMaker** on **AWS Cloud** to analyze customer churn and acquisition costs, generating detailed, automated reports that **reduced manual analysis time by 50%.**
- Deployed a **Natural Language Processing** based feedback tool to analyze survey responses, delivering insights at both individual and community levels improving engagement strategies and boosted retention with a **verified impact of 70%.**

Gartner Inc.| Data Analyst March 2022 - Jun 2023

- Analyzed datasets from 90% of Fortune 500 companies using Tableau and SQL, uncovering key trends that optimized Gartner's research methodologies contributing to a **20% improvement in client satisfaction and decision-making accuracy.**
- Automated reporting workflows with **VBA** and **Macros**, **cutting report generation time by 50%** and streamlining tasks like pivot table creation and data visualization in Excel and Tableau, **improving team productivity by 30%.**
- Designed dynamic visualizations in **Power BI**, **Tableau**, and **Looker**, simplifying complex survey data into actionable insights for technical and non-technical stakeholders, which improved operational **decision-making speed by 25%.**

Indian Oil Corporation Limited| Supply Chain Analyst Intern May 2021 - Sep 2021

- Developed an advanced cost-optimization model using **Excel Solver**, **reducing bulk LPG transportation expenses by 5%** while improving logistics flexibility to handle last-minute operational changes, enhancing overall supply chain.
- Automated supply route optimization and demand forecasting using **Pandas, SQL,** and **Google BigQuery**, **cutting transportation time and costs by 15%,** while delivering actionable reports.
- Engineered a predictive machine learning model in Python to calculate the **shortest and least-cost LPG delivery routes** in northern India, integrating multimodal transportation techniques and **increasing delivery efficiency by 20%.**

PROJECTS

Customer Segmentation with AWS and PowerBi

- Developed a customer segmentation model using Python (Pandas, Scikit-learn) and **AWS (S3, Lambda)**, boosting data transformation speed by 30% and increasing targeted marketing **effectiveness by 20%.**
- Automated data ingestion workflows with **AWS Step Functions**, reducing **manual efforts by 40%**, and designed Power BI dashboards to provide stakeholders with actionable insights for strategic decisions.
- Designed and implemented clustering algorithms using **Scikit-learn** to identify distinct customer segments, enabling personalized marketing campaigns and improving **customer retention by 15%**.

Stock Market Prediction Using Temporal Convolutional Networks (TCN)

- Built a stock price prediction model using Temporal Convolutional Networks in **TensorFlow** and **Pandas**, achieving **97% accuracy**.
- Applied **Monte Carlo Simulations** and Modern Portfolio Theory **(MPT)** to enhance forecasting accuracy by 20%.
- Leveraged **Sharpe Ratio** and **Value at Risk (VaR)** to evaluate portfolio performance and manage risk, improving financial decision-making and reducing **portfolio volatility by 30%**.