
Skills

- SQL (HiveQL, Oracle, SQL Server, MySQL, Postgres)
- Python (Pandas, Plotly, Scikit-learn, Scikit-tda, Flask, Openpyxl, Numpy, Matplotlib, Shiny)
- Excel (XLookup, Conditional Formatting, Pivot Tables)
- Analysis (Regression Analysis, Machine Learning, Topological Data Analysis, Statistical Analysis)
- Cloud (GCP)
- Visualizations (Tableau, Power BI)

Work Experience**DATA ANALYST – Target**

December 2022 - Present

- Created **ML model** to predict resale values of salvaged items through the Business-to-Business Auctions with Middle Mile DS Team.
- Designed **KPIs** for a Root Cause Analysis Dashboard to help **leadership** identify and analyze drivers of missed forecasts.
- Developed a **Python** framework to call Target's Greenfield **API**, reducing reporting time during peak seasons and providing key peak metrics to stakeholders. This initiative resulted in significant time savings and improved efficiency in daily reporting.
- Collaborated closely with the FDC analyst to understand and migrate processes from decommissioned database, resulting in a 2-hour reduction in manual input and improved overall efficiency.
- Leveraged Python libraries, including **pandas**, **duckdb**, and **HQL**, to conduct comprehensive quality checks on datasets, answer ad hoc requests to meet immediate business needs, and support data-driven decision-making.

ANALYTICS CONSULTANT – NYSTEC – Albany, NY

October 2021 - December 2022

- Spearheaded the development of internal **Python** tools to enhance data processing capabilities within the organization utilizing **cx_oracle**, **pandas**, and **SQL**.
- Streamlined New York State Medicaid Reconciliation efforts to determine over and under payment of claims by implementing automation using **Python**, **Tableau**, and **SQL**, resulting in 30 hours of weekly time savings.
- Devised and implemented a randomized sample program to assess **healthcare** provider claims for New York State's Children Transformation QA Program, evaluating critical parameters such as providers, service dates, claims cost, procedure codes, and rate codes.
- Demonstrated leadership by leading **Python** and **SQL** training initiatives for data analysts, enhancing their skills and productivity.

ASSOCIATE CONSULTANT – NYSTEC – Albany, NY

August 2020 - October 2021

- Developed critical COVID-19 data points and automated reporting based on executive requirements using **Excel**, **Python**, and **SQL**.
- Implemented automated COVID-19 data **ETL pipelines**, integrating various **APIs**, **Python**, and **Oracle DBs** for seamless processing.

CREDITS & INCENTIVES INTERN – HCA Healthcare – Nashville, TN

June 2019 – August 2019

- Developed comprehensive reports analyzing energy data to strengthen existing tax incentives for facilities, thereby facilitating their qualification to receive the incentives.

Projects**The Insight of Entropy in Soccer Matches**

May 2023

- Applied Shannon Entropy to create a soccer match momentum metric, the model predicted match outcomes with 75.27% accuracy.
- The model showed comparable prediction accuracy using machine learning, performing similarly to **Random Forest**.

Mapper Algorithm for Feature Selection

December 2022

- Employed **Mapper Algorithm** powered by **DBSCAN** to develop a visual feature selection tool for machine learning models.

Latin Alphabet Character Prediction

November 2022

- Developed a classification algorithm using Scikit-TDA's **Risper** package for persistent homology using different scanning techniques.

Football Manager Machine Learning Predictions

December 2021

- Leveraged a range of **Machine Learning techniques** (MLP, Random Forest, K-Nearest Neighbor, Decision Trees, Gaussian Naive Bayes, and Logistic Regression) to predict outcomes based on questions.

Education**MASTER OF SCIENCE – University at Albany – Albany, NY**

Majors: Data Science, 3.98 GPA

BACHELOR OF SCIENCE IN BUSINESS – Clarkson University – Potsdam, NY

Majors: Business Intelligence & Data Analytics, 3.37 GPA

Minors: Computer Science, Statistics, and Mathematics