REAZ ELIAS

elias.reaz@gmail.com ✉
www.linkedin.com/in/reaz-ussalamelias 𝗶𝗻
+1 (647) 404-9221 ☏
https://eliasreaz.github.io 𖥔

>> DATA SCIENCE | ANALYTICS | MACHINE LEARNING

MOTIVATION

I am passionate about solving business problems using Data Science & Machine Learning. I systematically & creatively use my skillset to add tangible value to the team, the business, and the end-user. I am constantly learning, and always looking to improve.

SKILLS & TOOLS

Programming: Python (Base, Pandas, Numpy, Matplotlib, Scikit-Learn, Keras), SQL

Machine Learning: Linear Regression, Logistic Regression, Decision Tree, Random Forest, KNN, k-means, PCA, Association Rule Learning, Causal Impact Analysis

Other: Statistics (Inferential Statistics, Hypothesis Testing), Github, Data Visualization, MS Office, Tableau, Jupyter Notebook, Streamlit, AWS Cloud Platform

EXPERIENCE

Data Scientist - Pitstop, Toronto
SEP 2020 - DEC 2023

- Built and deployed a predictive maintenance model that notifies Fleet Managers in advance of potential vehicle breakdowns or the need for major repairs/replacements, based on monitoring the co-occurance of a group of related Engine/Exhaust related Diagnostic Trouble Codes (DTC). The model helps prevent costly repairs/replacements before breakdowns occur. The company continues to use this application
- To prevent engine starting issues for parked vehicles, I developed an alert application that considers duration of parking and the battery status at the time of parking. The model is particularly useful for preventing starting failure, especially during the winter season
- Developed a word parsing model based on tf-idf (term frequency and inverse document frequency) to identify VMRS (Vehicle Maintenance Reporting Standard) codes from DTC description. The application assists Fleet Mangers in evaluating the systems generating trouble codes
- Data Processing & Analysis: Clean, process, insert service records from diverse fleets into a Postgres database; Analyze relationship or relevance between service records and fault codes occurring prior to shop visits and generate a contingency matrix; Verify and assess quality of alerts from various algorithms; Retrieve faultcode histories querying the API of telematics providers.

Data Analyst - Self-Employed
JULY 2019 - AUGUST 2020

- Data Processing, Exploratory Data Analysis, & Visualization: Examining the Great Lakes fisheries data to identify relationships between fish biomass and total phosphorus in nearshore and offshore waters. Key features are fishing dates, fish types, latitude, longitude, station depth, net lengths, and fish biomass. Addressing null, missing, irregular values, summarizing statistics, and presenting visual relationships using scatterplots, paired plots and boxplots.

PROJECTS

"You Are What You Eat" Customer Segmentation

- Used k-means clustering on grocery transaction data to split out customers into distinct "shopper types" that could be used to better understand customers over time, and to more accurately target customers with relevant content & promotions.

REAZ ELIAS

eliasreaz@gmail.com ✉

www.linkedin.com/in/reaz-ussalamelias [in]

+1 (647) 404-9221 ☎

https://eliasreaz.github.io 🐙

>> DATA SCIENCE | ANALYTICS | MACHINE LEARNING

PROJECTS

Predicting Customer Loyalty Score

- Used Random Forest Regressor on grocery customer information and transactional data to predict loyalty score for customers whose scores were missing in the database. The goal was to understand trusted customers who frequent the shop often and what features influence the repeated shop visits.

Understanding Product Relationship using Association Rule Learning

- Used Association Rule Learning to analyse the transactional relationships & dependencies between products in the drink section of a grocery store. The objective is to rearrange the drink secton in the store so that customers easily find products they buy together and the marketing team starts running bundled promotions.

EDUCATION

PhD (Industrial Engineering)
2008 - 2015 - Toronto Metropiltan University, Toronto, Canada

COURSES & CERTS

DSI Data Science Professional Certification

Actionable Learnings: Extracting & manipulating data using SQL. Application of statistical concepts such as hypothesis tests for measuring the effect of AB Tests. Utilising Github for version control, and collaboration. Using Python for data analysis, manipulation & visualisation. Applying data preparation steps for ML including missing values, categorical variable encoding, outliers, feature scaling, feature selection & model validation. Applying Machine Learning algorithms for Regression, Classification, Clustering, Association Rule learning, and Causal Impact Analysis for measuring the impact of an event over time. Machine Learning pipelines to streamline the ML pre-processing & modelling phase. Deployment of a ML pipeline onto a live website using Streamlit. Using Tableau to create powerful Data Visualizations. Turning business problems into Data Science solutions.

Business Science University (BSU)

Actionable Learnings: Python for Machine Learning, APIs, and Data Science. Sales forecasting using Time sereis analysis with ARIMA in Python.