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# MILAGROS CORTEZ

# **Skills**

- SQL (SQL Server)
- R (ggplot2, plotly, diplyr, caret, E1071, knitr, xml)
- Python (Pandas, NumPy, SciPy, MatPlotLib, Seaborn, StatsModels, PyGam)
- Tableau
- HTML and CSS
- XML, XSLT, and XPath

- Microsoft Excel (VLookup, Conditional Formatting, Pivot Tables)
- Microsoft Word
- Microsoft Power BI
- Fluent in English and Spanish with basic knowledge of Japanese

# **Projects**

# PROVINCIAL ELECTRICITY GENERATION DASHBOARD -Personal Project- Edmonton, AB

August 2023

Edmonton, AB, T5T 7P8

- Created a dashboard with Power BI to compare electricity generation in Canadian provinces.
- Transformed and processed the data downloaded from Kaggle by using DAX and Excel to ensure data completeness and validity.

# BUSINESS SALES DATA CLEANING AND EDA- Personal Project -Edmonton, AB

August 2023

- Utilized SQL to extract data from 2 different related tables from a business database available in Kaggle using JOIN.
- Cleaned the data removing rows with NULL values using DELETE and verified for data integrity.
- Loaded and visualized data with **Python** to identify if there is seasonality in the data and what can be seen between 2019 and 2020 in the volumes and amounts of deliveries using **Jupyter Lab, MatPlotLib**, and **Seaborn**.
- Compiled a report using Markdown in GitHub.

## PALMER ARCHIPELAGO PENGUIN DATA - Personal Project - Edmonton, AB

August 2023

- Utilized **Python** to analyze 334 penguins of three penguin species recorded in the Palmer Archipelago.
- Performed data cleaning and data manipulation to successfully analyze the data.
- Aggregated and visualized the data by using pandas, Seaborn, NumPy, and matplotlib to compile a professional report in Jupyter Lab.

## 2023 HENLEY GLOBAL PASSPORT INDEX DASHBOARD - Personal Project - Edmonton, AB

August 2023

- Created a dashboard with Tableau to compare between Rank and Visa Free Destinations of passports according to the recent Henley Global Passport Index data.
- The dashboard and accompanying data visualization provide a comprehensive understanding of global travel privileges and visafree access.

# BIKE-SHARE CASE STUDY REPORT - Personal Project - Edmonton, AB

July 2023

- Utilized R Studio to perform a data analysis on 5,829,031 bike rides from a fictional bike company in Chicago.
- Performed data cleaning, transformations, and text analysis to identify the type of customers, ride times, and location of two major customer groups.
- Aggregated and visualized the data by using gggplot2, diplyr, lubridate, and egg to compile a professional report in R Markdown.
- The report aims to analyze customer data from the past 12 months to provide insights to the Cyclistic's marketing branch to consider in its new marketing strategies.

#### OPTIMIZING THE ACKLEY FUNCTION AND MODELING THE NILE RIVER - Personal Project - Edmonton, AB April 2023

- Utilized **R Studio** and **R Markdown** to create a two-part report where I optimize the Ackley function and model the Nile River using the Robins-Monro Algorithm.
- Optimizing the Ackley function was done by using a search domain consisting of a hypercube in d = 2, 4, and 6 dimensions, and using the three basic search methods of SRS, LRS, and ELRS.
- Modeling the Nile River was sone using the R Nile dataset, a gradient loss function, and the Robins-Monro Algorithm at d=2, 4,

#### **Education**

# BACHELOR OF SCIENCE WITH SPECIALIZATION IN STATISTICS - University of Alberta - Edmonton, AB

June 2023

Major: Statistics

GPA: 3.2

Relevant Coursework: Statistics, Calculus, Probability, Population Genetics, Computing for Data Science, Data Mining, R, Python, SQL.

# **Work Experience**

## EXAM INVIGILATOR - IELTS - Edmonton, AB, Canada

February 2023 - Present

- Collaborated with a team of 2-4 individuals to efficiently register and supervise test takers, and effectively facilitated the
  distribution of materials and exams.
- Maintained the accuracy of test-takers information during the registration process.
- Demonstrated exceptional organizational skills and attention to detail in providing timely support to test takers.

# AREA MANAGER INTERN- Amazon - New Westminster, BC, Canada

June 2022 - August 2022

- Worked with a team of 3-5 managers on-site to write audits, optimize production, and manage associates in a strategic way to meet set goals.
- Created a report as part of an internship project where I researched and analyzed data in relation to package errors in the shipping area of YVR3. Used R and Excel to clean and manipulate data find the root cause of the problem and suggest methods to decrease the number of package errors.
- Used Microsoft Word, PowerPoint, and Lucidchart to create an internship project report and presentation to stakeholders.

## SALES ASSOCIATE - American Eagle Outfitters - Edmonton, AB, Canada

August 2021 - June 2022

• Organized items in the store and used the Point of Service (POS) system to sell items, applied my skills in Spanish to help customers, and contributed to sales meeting sales goals.

## HR ASSISTANT - Explore Edmonton - Edmonton, AB, Canada

July 2021

- Used Human Resources Information Systems (HRIS) including ADP to input and retrieve data, maintain employee records, and ensure data accuracy and confidentiality.
- Worked with a team to create contracts, files, and registration of employees into the payroll system.
- Reconciled employee discrepancies in employee records.
- Used Microsoft Excel to input data, create pivot tables, and conduct data audits.