## Maricarmen Arenas Leiva

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Languages (written and spoken): French, English, and Spanish

## Profile

**Database Management:** Proficient in SQL for efficient data querying and management. **Data Cleaning and Preprocessing:** Skilled in data cleaning techniques, handling missing data,

normalization, and standardization.

Business Analysis Skills:

**Process Automation:** Leveraging VBA scripting, Bash, and Advent scripting to automate processes and improve operational efficiency.

**IT Proficiency:** Strong IT skills, utilizing tools like Salesforce for project management and tracking progress.

**Project Management:** Managing multiple projects simultaneously, ensuring successful outcomes through effective tracking and collaboration.

**Communication and Presentation:** Excellent written and verbal communication skills to convey complex concepts to non-technical stakeholders.

**Problem-Solving:** Strong critical thinking abilities to break down complex problems and find effective solutions.

**Financial Analysis:** Interpreting financial reports, understanding economic trends, and predicting market behavior.

**Statistical Analysis:** Proficient in regression analysis, cluster analysis, time-series analysis, and hypothesis testing to drive informed decision-making.

**Programming:** Skilled in R, Python, Excel, VBA scripting, with expertise in libraries like pandas, NumPy, and scikit-learn.

**Data Visualization:** Experienced in Matplotlib, Seaborn, EXCEL graphs and currently self-teaching Tableau for impactful data visualizations.

**Machine Learning:** Knowledgeable in linear regression, K-nearest neighbors, and applying machine learning algorithms to real-world datasets.

#### **Academics**

# Master of science (MSc) in Business intelligence

2020-2022

HEC Montreal, Canada

## **Bachelor of science in Economics**

2013-2016

Université de Québec à Montréal, Canada

Research Projects

## Thesis: Detecting Coordinated Activities through OnlyFans' Tweets

2021-2022

- Mila Research Institute & HEC
  - Use of Graphs and unsupervised
  - Manipulate BIG sets of Data (Twitter Data)

**Research paper based on my research:** Maricarmen Arenas, Pratheeksha Nair, Reihaneh Rabbany (Supervisor) and Golnoosh Farnadi (Supervisor)," Social Media as a Vector for Escort Ads: A Study on OnlyFans advertisements on Twitter", 15<sup>th</sup> ACM Web Science Conference 2023, https://dl.acm.org/doi/10.1145/3578503.3583609

## Professional experience

## Research Analyst – Student (remote)

November 2020 - April 2022

## Invest in Canada (IIC), Ottawa

#### **Achievements**

- Contributed to the FDI Tracker project, built through Databricks by building web crawlers and NLP algorithms.
- Contributed to Data Catalogue (use to do Datapoint updates on the Official INC website)
- Contributed to multiple FDI Sector Pamphlets

#### Tasks

- Assess companies' propensity to invest in Canada (using our in-house scoring model) by doing research on companies and economic sectors.
- Compute and understand Economic trends and share reports with Investor Services
- Interpret simple financial data related to a specific company.
- Handling multiple projects and management using Salesforce.
- Tools: Capital IQ, Pitchbook, D&B Hoover, StatCan, Official Reports, etc.

#### Self-Employed

February 2018-June 2020

#### MS EXCEL Freelancer, Montreal

- Offered tutoring for VBA, Excel, and SQL helped students with their academic projects.
- Provided Consulting services for working individuals & providing solutions using EXCEL & VBA Macros

#### <u>Application Support Specialist</u>(contract)

May 2019 - January 2020

#### Onepoint (for BNP), Montreal

- UNIX environment
- Query data/information using SQL Oracle
- Read, wrote, and ran scripts (bash, shell, Python)
- Monitor Autosys (scheduler) and usage of ServiceNow.
- SSH encryption

#### Operations Technician / Systems (Database Team)

May 2018-May 2019

## Jarislowsky, Fraser Limited, Montreal

#### **Achievements**

- Reorganised and improved dividend, index, and pricing processes
- Achieved between 80-100% automation using VBA, Bash, and "Advent" scripting.

#### Tasks

- Used Bloomberg Terminal (Terminal & API) daily.
- Use of VBA scripting, EXCEL formulas and SQL requests

#### Research Associate, Database (contract)

January 2017-June 2017

#### Evalueserve, Chile

#### **Achievements**

- Automated and improved 'Americas' pricing process and Corporate Action process using VBA and SQL databases.
- Created a macro to track Holidays and update the data in our system.

## Tasks

- Conducted simple research using Reuters and Bloomberg Terminals
- Use of VBA scripting, EXCEL formulas and SQL requests

Immigration, Refugees and Citizenship Canada, Montreal

Technical advisor for iOS and macOS

June 2015-September 2016

The Minacs Group/Concentrix, Montreal

**Executive assistant (contract)** 

July 2013- August 2013