# JUAN FRANCISCO PALMEROS BARRADAS

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#### **SUMMARY**

Data Science expert with a proven track record of leveraging machine learning and data analysis to drive business results in the finance industry and public policy field. Proficient in Python, R, and AWS Cloud services. Visit my personal website for more dynamic and up to date information.

# **EDUCATION**

## Master's in Data Science

Mexico Autonomous Institute of Technology (ITAM).

Mexico City, Mexico August 2022 - June 2023

GPA: 9/10

Specialized in Machine Learning, Data Mining, Data Architecture, Statistics, Bayesian Statistics, and Causal Inference.

# **Bachelor's in Economics**

Center for Economic Research and Teaching (CIDE), Mexico City, Mexico August 2015 – July 2019 GPA: 9.2/10

Specialized in Microeconomics, Econometrics, Microeconometrics, and Applied Econometrics.

## **EXPERIENCE**

## **Data Scientist**

Financial Group Banorte, Mexico June – present 2023

- Conducted an statistical analysis to identify the competitors infrastructure strategy in order to improve Banorte's ATM and branch network.
- Perform AB testing to evaluate the impact of new features in the mobile app.
- Implement experiments to bolster the digital onboarding process.

# **Data Scientist (External Consultant)**

Ozmo Futures, Mexico August – November 2022

- Spearheaded a customer segmentation project to boost market share for a prominent Mexican commercial bank
- Trained unsupervised machine learning model for customer profiling.
- Developed a strategic target group for marketing and business initiatives.
- Delivered a comprehensive Shiny app dashboard

# **Financial Researcher**

Central Bank of Mexico, Mexico August 2019 – August 2022

- Pioneered the development of the first Latin American national <u>survey</u> to measure Financial Health
- Employed a k-means clustering algorithm for optimal financial infrastructure allocation in Mexico, resulting in a 120 million mexican pesos investment.

Produced statistical indicators for financial inclusion in Mexico.

#### **TECHNICAL SKILLS**

**Python**: pandas, sklearn, scipy, tensorflow, keras, matplotlib, seaborn, pickle, beautifulsoup, pylint, boto3, awswrangler, pyspark. **R**: Tidyverse, rstan. **Cloud AWS**: S3, EC2, Athenea, EMR **SQL**: Postgresql, Sqlite **Version Control**: Github **Environments**: Docker, Conda, Venv

#### **PROJECTS**

#### **Handwritten Recognition**

- Developed a Shiny app dashboard that predicts user-inputted handwritten digits.
- Trained Support Vector Machine and Random Forest Classifiers.
- Implemented a dockerized environment for application and databases isolation.

## Web Scrapping of The Simpsons TV Show

- Built a pipeline for automated data extraction of The Simpsons' episodes.
- Designed a Data Lake in an AWS S3 bucket.
- Created a Streamlit dashboard for generating episode statistics and inferences.

# **Deforestation Image Recognition**

- Orchestrated a Deep Learning project to classify deforestation images from Georgia, USA.
- Trained Convolutional Neural Networks via a transfer learning strategy.

### ADDITIONAL INFORMATION

Languages: English (TOEFL iBT 104/120), French (DALF C1, 85/100), Spanish (Native)

## Continuing Education:

- Micromaster in Data Science, University of California San Diego (September 2019 2020)
- Data Science with R: Tidyverse, Udemy (2022 Present)
- Bash Scripting: From Zero to Automation, Udemy (2022)
- Suptech and Regtech Course, Center for Latin American Monetary Studies (2020)