JUAN FRANCISCO PALMEROS BARRADAS Mexico City | +52 55 8687 3474 | palmerosjuanfrancisco@gmail.com | Github

# **SUMMARY**

Data Science expert with a proven track record of leveraging machine learning and data architecture to drive business results. Experienced in leading data-oriented projects in both the finance industry. Proficient in Python, R, and AWS Cloud services.

## **EDUCATION**

**Master's in Data Science** – Mexico Autonomous Institute of Technology (ITAM), Mexico City, Mexico August 2022 – present | 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 Focused on Microeconomics, Econometrics, Microeconometrics, and Applied Econometrics.

#### **EXPERIENCE**

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)