MARTIN RAABE-LOPEZ

DATA SCIENTIST/APPLIED MATHEMATICIAN

CONTACT

619-962-2718

Martin.raabelopez@gmail.com

linkedin.com/in/martin-r-l

EDUCATION

CSU Long Beach

2019-2021

MS, Applied Math

UC Berkeley

2013-2016

BA, Physics

BA, Applied Math

SKILLS

Statistical Inference

Machine Learning

Experimental Design

Dev-Ops

LANGUAGES/TOOLS

Python, R, SQL

DBT, AWS, Tealium

PROFILE

Accomplished researcher with demonstrated proficiency in statistical inference, experimental design, and information theory. Seasoned navigator of business analytics and deployment of nimble machine learning solutions. Currently leveraging AWS and DBT to orchestrate data warehousing and data-mining operations into compelling narratives. Eager to navigate uncharted territories, executing data experiments that propel business insights and optimize performance.

EXPERIENCE

Analytics Engineer - Diversyfund

May 2022 – July 2023

- Designed and architected SQL-based warehouses for efficient data storage and accessibility.
- Employed DBT in combination with AWS to streamline data transformation and warehousing, enhancing data quality, reporting accuracy, and overall efficiency of BI department.
- Built machine learning tools for attribution, recommendation, record linkage, and real estate metrics, driving data-informed decisions across departments such as marketing, finance, and product.

Graduate Student Assistant – CSU Long Beach

June 2020 - May 2021

- Provided written technical reports and documentation as part of the publication process. Built visualizations in Tableau, R, and Python.
- Surveyed relevant literature and composed briefs that summarized information in content areas like neural networks, clustering algorithms, and information theory.
- Built proof of concept examples and provided demonstrations of state-of-the-art techniques.

Teacher – Fusion Academy

January 2019 - May 2022

- Taught H.S. science and mathematics, using data-driven strategy to optimize engagement and achievement.
- Implemented individualized educational programs, incorporating experimental design principles to tailor laboratory experience and method of assessment.
- Maintained complete and accurate records of educational program, displaying meticulous data management.

MARTIN RAABE-LOPEZ

SELECTED PROJECTS/CERTIFICATES

CONTACT

619-962-2718

Martin.raabelopez@gmail.com

linkedin.com/in/martin-r-l

EDUCATION

CSU Long Beach
2019-2021
MS, Applied Math

UC Berkeley
2013-2016
BA, Physics
BA, Applied Math

SKILLS

Statistical Inference

Machine Learning

Experimental Design

Dev-Ops

LANGUAGES/TOOLS

Python, R, SQL
DBT, AWS, Tealium

CERTIFICATES

- Datacamp - Data Scientist with R
- Datacamp - Data Scientist with Python
- Google - Advanced Data Analytics Professional

DeepLearning.AI
- TensorFlow Developer Professional Certificate
- Machine Learning Engineering for Production Specialty.
- Practical Data Science on the AWS Cloud Specialty
- Generative Adversarial Networks Specialty

PROJECTS

User Behavior Prediction
Developed a Proof-of-Concept model aimed at predicting user behavior, with a particular focus on rare events.
- Applied Synthetic Minority Over-sampling Technique (SMOTE) and Tomek-links to synthetically balance datasets, thereby enhancing the model's ability to predict rare events.
- Constructed a comprehensive data pipeline that ingested the re-balanced data and performed robust feature engineering and tagging to enrich the dataset, thereby augmenting the predictive power of the model.
- Implemented a variety of machine learning algorithms, such as XGBoost, to predict user behavior based on the enriched data, accommodating both binary and multi-class prediction criteria.

Record Linkage
Designed and implemented a record-linkage tool aimed at streamlining user data management between Dev/BI.
- Built secure wrappers to fetch and store batched data from AWS Redshift, incorporating AWS best practices such as secrets manager and fully partitioned IAM resources for enhanced security and robustness.
- Performed extensive data cleaning and manipulation, which involved logical parsing of user-input names and emails into structured, clean fields.
- Engaged in rigorous feature construction from limited data using standard NLP techniques like n-grams, resulting in over a 20% increase in record-linkage accuracy.
- Made effective use of the open-source recordlinkage package, which significantly boosted the efficiency of the record-linkage tool.