

JUAN GABRIEL LINARES VELASQUEZ

DATA SCIENTIST

OBJECTIVE

I am a master's student in Data Science at The University of Texas at Austin seeking a Data Science Internship to apply graduate-level training in machine learning, statistics, and data analysis to real-world problems. Proficient in Python and R for data modeling and visualization. I am eager to contribute to data-driven projects that generate actionable insights.

DATA SCIENCE PROJECTS

ESTIMATING THE TREATMENT EFFECT OF RIGHT HEART CATHETERIZATION ON PATIENT MORTALITY - CAUSAL INFERENCE

- Applied propensity score matching to create balanced comparison groups from observational data.
- Modeled the effect of Right Heart Catheterization on 30-day patient mortality.
- Interpreted the results to assess the magnitude and statistical significance of the treatment effect.
- Identified and analyzed potential confounders influencing outcomes.

GROUND-LEVEL AIR POLLUTION USING SATELLITE IMAGERY DATA - PREDICTION MODELING

- Applied machine learning algorithms (Decision Trees, Random Forests and K-Nearest Neighbors) to predict daily particulate matter concentrations.
- Optimized model hyperparameters for predictive accuracy.
- Used cross validation and predictive accuracy metrics to evaluate models and compare results against a baseline linear regression model.

MOUSE ALLERGEN AND ASTHMA STUDY - LINEAR REGRESSION MODELING

- Built and compared simple and multiple linear regression models to examine relationships between health outcomes and environmental predictors.
- Conducted exploratory visualizations to identify outliers, nonlinear trends, and influential variables.
- Diagnosed model assumptions including linearity, homoscedasticity, and normality of residuals using diagnostic plots.
- Compared nested models for variable selection and interpreted regression coefficients in the context of environmental health.

CONTACT

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Woodbridge, VA

ABOUT ME

Graduate student in Data Science with prior training in Electrical and Telecommunications Engineering, seeking to work with real-world data and tackle challenges across diverse domains.

EDUCATION

UNIVERSITY OF TEXAS AT AUSTIN, USA

MS in Data Science
(Expected December 2026)

UNIVERSIDAD CATOLICA SAN PABLO, PERU

Bachelor's Degree in Electrical and Telecommunications Engineering
(September 2017)

NORTHERN VIRGINIA COMMUNITY COLLEGE, USA

Cyber Security, Career Studies Certificate (August 2019)

Network Engineering (Specialist), Career Studies certificate (May 2019)

WORLD CUBE COMPETITIONS - EXPLORATORY DATA ANALYSIS

- Cleaned, merged, and transformed multi-table relational data to support comprehensive performance analysis.
- Explored and visualized trends in solve times, rankings, and competitor performance across events.
- Produced a structured R Quarto report integrating annotated code and interpretation.

EMPLOYMENT HISTORY

TELECOMMUNICATIONS TECHNICIAN

CYMTEL SAC, Peru

Apr. 2024 – Jun. 2025

- Maintained and troubleshooted data center electrical systems to ensure optimal uptime.
- Integrated new equipment into private monitoring networks for remote operation.
- Conducted periodic inspections and collaborated across teams to deploy system improvements with minimal downtime.

MEDICAL INTERPRETER (REMOTE)

INTERPRETIA-LANGUAGE LINE SOLUTIONS, Peru/USA

Nov. 2019 – Nov. 2023

- Facilitated accurate communication between English-speaking healthcare professionals and Spanish speaking patients.
- Applied strong understanding of medical terminology and cultural nuances to ensure clarity and empathy.

HVAC-TECHNICIAN

REFRITEC LLC, Virginia, USA

Oct. 2017 – Aug. 2019

- Installed and maintained HVAC systems for residential and commercial facilities.
- Diagnosed and resolved electrical and mechanical issues to optimize performance and minimize downtime.

ELECTRICAL ENGINEERING INTERN

SISTEMAS ELECTRÓNICOS VECTOR SRL, Arequipa, Peru

Jun. 2016 – Aug. 2017

- Designed and implemented an audio-switching module using microcontrollers and relay systems.
- Operated advanced electronic lab instruments including spectrum analyzers, oscilloscopes, and RF components to support telecommunications testing.

SKILLS

- Python : numpy, pandas, scikit-learn, matplotlib
- R: dplyr, tidymodels, tidyverse, MatchIt, survival, pROC
- SQL
- Quarto file reporting
- Jupyter Notebooks
- Statistical Analysis and Inference
- Machine learning
- Classification and Clustering
- Dimensionality Reduction
- Survival Analysis
- Longitudinal Analysis
- Cross validation
- Data wrangling and cleaning
- Data Visualization
- Rstudio
- Pycharm
- GoogleColab

LANGUAGES

English

Spanish

COURSEWORK

- Data Structures and Algorithms
- Probability and Inference
- Regression and Predictive Modeling
- Principles of Data Science
- Machine Learning
- Data Science for Health Discovery and Innovation