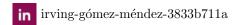
# IRVING GÓMEZ MÉNDEZ







## Summary

I am a mathematician that merges the experience in applied statistics and data science with a solid theoretical background in statistics (Regression, Inference, Multivariate Analysis, etc.) and machine learning (Random Forests, Neural Networks, SVM, Recommender Systems, etc.) who enjoys passing from theory to development of tech products.

A portfolio of past and current projects can be found at https://irvinggomez.netlify.app/#projects

# Computing Skills

Programming Languages: Python, TensorFlow, Julia, R Data Visualization: Plotly, Tableau, Shiny, ggplot2

Data Analysis: SPSS, Google Analytics Other Languages: LATEX, HTML, CSS, SQL

#### Research Interests

Computer Statistics Nonparametric Statistics Inference with Missing Data Data Science and Machine Learning

## **Professional Experience**

#### Centro de Investigación en Matemáticas

#### PhD in Probability and Statistics

August 2016 - Now

• Teaching assistant in undergraduate and graduate subjects.

Statistical Inference 2016 - 2019 Statistical Models 2017 - 2019

- Research and implementation of algorithms to handle complex missing mechanisms using random forests.

  Presented in the I Workshop on Deep Learning and Data Science.
- Implementation of algorithms to actively querying missing information for recommender systems using neural networks.

In collaboration with Inria Lille-Nord Europe.

• Development of new methodologies based on non-exhaustive classification for detection of illegal traffic of species in America.

In collaboration with Cinvestav-Irapuato.

#### MSc in Probability and Statistics

August 2014 - July 2016

 $\bullet$  Teaching assistant in undergraduate and graduate subjects.

Statistical Inference 2015

• Monitor of undergraduate students.

XII Workshop on the Solution of Calculus Problems

- Design and development of a graphical user interface for inspection data in reliability.
- Implementation of methodologies for control quality with heavily censored data.

  Presented in the Workshop of Statistics, Data Mining and Environmental Sciences.

Presented in the I Symposium of Inference and Statistical Modeling.

- Statistical consulting for the automotive industry, improving its warranty management.
- Reliability analysis for the food industry, increasing preference of consumers.

#### **PESiSa**

#### External Advisor

January 2014 - July 2014

- External advisor responding directly to the engineer direction.
- Improvement of control quality systems.
- Implementation of 5S processes.
- Design of lean manufacturing projects.

## **Academic Qualifications**

#### PhD in Probability and Statistics

#### Research stay

Courses: Scientific Computing for Probability and Statistics, Statistics for Complex Data, Data Science, Pattern Recognition, Asymptotic Theory for Probability and Statistics, Genomics

#### MSc in Probability and Statistics

Courses: Mathematical Statistics, Statistical Inference, Stochastic Models, Statistical Models, Reliability, Non-parametric Inference, Multivariate Analysis, Statistics for Industry and Natural Sciences

#### Bachelor's degree

Graduate by completion of master's degree credits

#### **Exchange Student**

# David Sprott Award, 2015

Annual prize granted by Centro de Investigación en Matemáticas (CIMAT) to the best master's exam in the area of statistics.

#### Conferences Attended

07/2018

XXVIII Annual Conference of the International Environmetrics Society, Guanajuato 09/2017

I School of Data Science, Cuernavaca

09/2015

XXX National Forum on Statistics, Acapulco

03/2014

XII School of Probability and Statistics, Guanajuato

# Conferences Given

03/2020

Inria Sequel Seminar, Lille

 $Some\ ideas\ for\ random\ forests\ with\ missing\ values$ 

01/2020

TRIPODS workshop CIMAT-University of Arizona, Guanajuato

Some ideas for random forests algorithms with missing values  $05/2019\,$ 

Probability and Statistics Seminar CIMAT, Guanajuato

Regression with missing data using random forests

# Certifications

# Languages

Google Analytics	Spanish	Native
Toyota Production System	Portuguese	Fluent
v v	English	Fluent
Data Sets with SQL	French	Basic
Statistical Analysis with SPSS	Russian	Basic