IRVING GÓMEZ MÉNDEZ

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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.com/#projects

Computing Skills

Programming Languages:	Python, Julia, R
Data Visualization:	Plotly, Tableau, Shiny, ggplot2
Deep Learning:	TensorFlow
Big Data:	Pyspark
Other Data Analysis:	SPSS, Google Analytics
Other Languages:	LaTeX, HTML, CSS, SQL

Professional Experience

OPI Analytics

Sr. Data Scientist

August 2020 - December 2020

- Development and improvement of end-to-end projects for sale's forecasts.
- Monitor and validation of building blocks.
- Automation of data science processes.
- Validation of pricing strategies.

Centro de Investigación en Matemáticas

PhD Candidate in Probability and Statistics

August 2016 - December 2020

- Research and implementation of algorithms to handle complex missing mechanisms using random forests.
- 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.
- Teaching assistant in undergraduate and graduate subjects.

MSc in Probability and Statistics

August 2014 - July 2016

- Design and development of a graphical user interface for inspection data in reliability.
- Implementation of methodologies for control quality with heavily censored data.
- Statistical consulting for the automotive industry, improving its warranty management.
- Reliability analysis for the food industry, increasing preference of consumers.
- Teaching assistant in undergraduate and graduate subjects.

PESiSa
External Advisor
January 2014 - July 2014

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

Academic Qualifications

PhD Candidate in Probability and Statistics ..... 2016 - 2020
Centro de Investigación en Matemáticas (CIMAT), Guanajuato, Mexico
Thesis: *Random Forests and Autoencoders with Missing Data*, under the direction of Dr. Emilien Joly

Research stay 2020
Institut National de Recherche en Informatique et en Automatique (Inria), Lille, France

Actively Querying Missing Information Using Neural Networks, on collaboration with Dr. Jill-Jênn Vie

MSc in Probability and Statistics
Centro de Investigación en Matemáticas (CIMAT), Guanajuato, Mexico ..... 2014 - 2016

Mathematical Engineer ..... 2009 - 2014
Instituto Politécnico Nacional (IPN), Mexico City, Mexico
Graduate by completion of master's degree credits

Exchange Student 2012
Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil
Scholarship holder by the Instituto Politécnico Nacional (IPN)

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 with missing values
05/2019
Probability and Statistics Seminar CIMAT, Guanajuato
Regression with missing data using random forests

Certifications

Google Analytics
Toyota Production System
Data Sets with SQL
SQL for Data Science
Statistical Analysis with SPSS

Languages

Spanish	Native
Portuguese	Fluent
English	Fluent
French	Basic
Russian	Basic