BERNARDO FLORES LÓPEZ

+1 (512) 592-2832 \diamond bernardofl@utexas.edu

EDUCATION

University of Texas at Austin

June 2026

Doctor of Philosophy in Statistics and Data Sciences, GPA: 3.9

Coursework: Monte Carlo Methods, Statistical Modelling 1 & 2, Linear Models

National Autonomous University of Mexico (UNAM)

February 2021

MS in Mathematics (Probability & Statistics), GPA: 9.82/10 (with honors)

Thesis: On network models based on random measures

Coursework: Multivariate Analysis, Statistical Machine Learning, Bayesian Statistics

National Autonomous University of Mexico

June 2017

BS in Actuarial Sciences, GPA: 9.27/10

Thesis: inference for stationary time series from a Bayesian nonparametrics perspective (in Spanish)

Coursework: Survival Analysis, Time Series, Nonparametric Methods, Databases, Algorithms & Data Structures

RESEARCH

- · Flores, B., Ni, Y., Xu, Y. and Müller, P. (2025). Graphical feature allocations (In preparation).
- Flores, B., Paul, A., Müller, P. and Wang, W. (2025). A mutation caller based on contrastive latent factors. (In preparation).
- Schwob, M., Duan, Y., Cantoni, B., Flores, B. and Walker, SG. (2025). Exercises in Statistical Reasoning. CRC Press.
- Flores, B. (2025). Predictive coresets. (In revision).
- · Bariletto, N., Flores, B. and Walker, SG. Posterior Consistency in Parametric Models via a Tighter Notion of Identifiability. (In revision)
- Flores, B. and Müller, P. (2025). Clustering and meta-analysis of studies using a multivariate linear dependent tail-free process. Annals of Applied Statistics (in press).
- · Flores, B. and Müller, P. (2023). Discussion on "Bayesian meta-analysis of penetrance for cancer risk" by Thanthirige Ruberu, Danielle Lakshika Braun, Giovanni Parmigiani, and Swati Biswas. Biometrics.

CONSULTING

National Electoral Institute

Summer 2021

Statistical Consultant

Mexico City, Mexico

- · Designed sample of polling stations and ballots to estimate the results of a national referendum.
- · Automated report generation using R.

National Institute for Nutrition and Medical Sciences

June 2019 - Oct 2020

Research Assistant

Jr. Data Scientist

Mexico City, Mexico

- $\cdot \ \text{Simulated Bayesian point process model to estimate the relative risk across Mexico of non-transmissible diseases}.$
- · Forecasted changes in risk based on policy modifications on the Mexican public health system.

Aleph Data Science & Consulting

Sept 2017 - Dec 2018 *Mexico City, Mexico*

ic variables using spatial models

- · Prediction and stratification of socioeconomic variables using spatial models.
- Deployment of clustering and classification algorithms for survey data.
- · Developed web applications using Shiny.
- \cdot Web-scraped social networks.

Institute of Applied Mathematics, UNAM

Feb 2017 - Sep 2017

Research Assistant

Mexico City, Mexico

- · Estimated risk of damage to buildings by natural disasters using clustering and spatial techniques.
- · Presented results to Mexican Congress.

INVITED AND CONTRIBUTED TALKS	
Contributed poster at the Summer school on Bayesian statistics and computation $HCMC,\ Vietnam$	Aug 2025
Contributed poster at BNP XIV Los Ángeles, California	Jun 2025
Contributed talk at Workshop on Bayesian Predictive Inference Los Ángeles, California	Jun 2025
Contributed poster at 2025 Best of Statistical Science Workshop College Station, Texas	Apr 2025
Invited talk at Frontiers of Bayesian Inference and Data Science Workshop $Oaxaca,\ Mexico$	Sept 2024

July 2024

August 2025

March 2022

Mexico City, Mexico

Mexico City, Mexico

SUPERVISION

Venice, Italy

Érick Felipe Allard Oropeza, UNAM

Honor thesis comitee member, BSc in Actuarial Sciences

Contributed poster at ISBA World Meeting 2024

· Reviewed thesis on spatial point processes.

Luis Eduardo González Medina, UNAM

Honor thesis comitee member, BSc in Actuarial Sciences

· Reviewed thesis on spatial modelling of non-transmissible diseases.

AWARDS

- · Travel award for BNP XIV.
- · Graduate School Supplemental Fellowship Award
- · Fellowship for master's degree, National Council of Science and Technology
- · Keller award for exceptional leadership, SDS, UT Austin, May 2024.
- · ISBA Travel Award for Junior Researchers, July 2024

SKILLS

- · Julia, R, Python, LATEX, Git, Bash, PyTorch, Numpyro.
- · Native Spanish, native proficiency English, intermediate French and German.