

Jorge Loría

PhD Candidate

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 loriaj.github.io/

Education

Purdue University

PhD Statistics, Advisor: Dr. Anindya Bhadra

2019 – 2024 (expected)

West Lafayette, Indiana, USA

Universidad de Costa Rica

BS Actuarial Science

2014 – 2017

San José, Costa Rica

Universidad de Costa Rica

BS Pure Mathematics

2015 – 2019

San José, Costa Rica

Publications

Preprints

- » **Loría, J.**, Bhadra A. (2023+), Posterior Inference on Infinitely Wide Bayesian Neural Networks under Weights with Unbounded Variance (*submitted*) [\[arxiv\]](#) [\[github\]](#)
- » Fernández-Loría, C, **Loría, J.** (2023+), Learning to Rank by Causal Effects Without Data to Accurately Estimate Causal Effects (*submitted*) [\[arxiv\]](#)
- » **Loría, J.**, Bhadra A. (2023+), SURE-tuned Bridge Regression (*submitted*) [\[arxiv\]](#) [\[github\]](#)

Publications

- » Viquez, J. J., Viquez, J., Campos, A., **Loría, J.**, Mendoza, L. A. (2018). Demographic Modeling via 3-dimensional Markov Chains *Revista de matemática Teoría y aplicaciones* available in <https://revistas.ucr.ac.cr/index.php/matematica/article/view/33608>

Awards

Ross-Lynn Research Scholar Grant

Spring 2024

provides funding for notable graduate students

Department of Statistics Teaching Academy Associate Nominee

Spring 2023

Emily and Paul Kidwell graduate student excellence Award

Spring 2022

given to graduate students in the Department of Statistics in Purdue University interested in careers in academia.

Bob and Marjorie McLean Scholarship

Summers 2020 and 2021

given to distinguished graduate students of the Department of Statistics in Purdue University.

Bronze Medal

2015

awarded in Competencia Iberoamericana Interuniversitaria de Matemáticas

Honorable Mention

2014

awarded in Competencia Iberoamericana Interuniversitaria de Matemáticas

Research Experience

Purdue University

- Research Assistant to Dr Anindya Bhadra

Spring 2022 and Fall 2023

in the project Inference in Infinite Width Neural Networks with Infinite Variance

- Research Assistant to Dr Arman Sabbaghi

Fall 2020-Summer 2021

designing experiments and evaluating results for refinement of nanotellurene thickness

- Team leader in Statistics for the Community

2019-2021

investigated the effects of having a bicycle to enable access to charity locations for impoverished people, with the LifeCycle program (*voluntary*).

Universidad de Costa Rica

- Research Assistant to Dr Luis Barboza

2016

- » implementing an actuarial model for a projection model of Caja Costarricense del Seguro Social
- » in the project "Prediction of North Hemisphere Temperatures using a Hierarchical Bayesian Model"

- Research Assistant to Dr Juan José Víquez

2015

- » implementing a multivariate Markov chains model for the projection of public universities in Costa Rica

Teaching Experience

Purdue University

Fall 2022

Instructor

Indiana, United States

- » Taught one section of the course *Introduction to Statistics*. An introductory course for undergraduate students of computer science, mathematics, actuarial science, and statistics majors. Responsibilities included three weekly lectures, preparation of the relevant material, grading, and collaboration with the other instructors in the evaluation and design of the assignments of the course.

Purdue University

Fall 2021 – Summer 2022, Summer 2023

Instructor

Indiana, United States

- » Taught two sections of the course *Elementary Statistical Methods*. An undergraduate level course for non-stem majors. Responsibilities included two weekly lectures to each section, preparation of the material, grading, leading teaching assistants and collaboration with other instructors for the evaluation of the course assignments.

Purdue University

Fall 2019 – Spring 2021

Teaching Assistant

Indiana, United States

- » Held laboratories for two sections, office hours, and grading for the course *Elementary Statistical Methods*.

Universidad de Costa Rica

Fall of 2017 & 2018

Instructor

San José, Costa Rica

- » Taught undergraduate course on basic functionalities of Excel and R. Responsibilities included lesson planning, course scheduling, and preparation of homework, exams, and course projects.

Industry Experience

Banco Promérica

January 2019 – July 2019

Financial Risk Analyst, analyzed financial data to evaluate and forecast credit risk

San José Costa Rica

Quanto Soluciones S.A.

January 2017 – July 2018

Actuarial Model Programmer, implemented credit risk models

San José Costa Rica

Communication

Spanish *Native*

English *Advanced*

Portuguese *Basic*

Summer Schools Attended

Courses in Functional Analysis and Complex Analysis

July 2018

Università per Stranieri di Perugia

Perugia, Italy

Course in Markov Chains and Applications

Summer 2015

Instituto de Matemática Pura e Aplicada

Rio de Janeiro, Brazil

Talks and Posters Presented

SURE-tuned Bridge Regression

August 7th, 2023

Contributed Paper in Joint Statistical Meeting

Toronto, Canada

SURE-tuned Bridge Regression

July 10th, 2023

Contributed talk in XVI Latin American Congress of Probability and Mathematical Statistics

São Paulo, Brazil

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SURE-tuned Bridge Regression

Poster in Statistics and Optimization in Data Science Workshop, in Business School

May 26th, 2023

Indiana, USA

Learner Culture and Perceptions of Social Media Applications and Learning Management Systems for Language Learning

Paper session American Educational Research Association (AERA)

April 2023

Illinois, USA

Examining Learner Culture, Country, Gender, and English Public Speaking and Peer Feedback Self-Efficacy

Round table in AERA

April 2023

Illinois, USA

Learning the Ranking of Causal Effects with Confounded Data

Flash talk in INFORMS

October 2022

Indiana, USA

⚙️ Skills

Coding Proficient in R and python

Statistics Bayesian data analysis and

Probability familiar with theory on basic stochastic processes, applications to finance, random matrix theory, and α -stable variables in one and several dimensions.

Machine Learning & Neural Networks familiar with implementation using common libraries and routines.

⚙️ Service and Leadership

- President of Statistics Graduate Student Organization

2021-2022

Indiana, USA

- Vice-president of Costa Rican Students Association at Purdue (CRISaP)

2021-2024

Indiana, USA