Jorge Loría

PhD in Statistics

Academic Employment

Aalto University

Postdoctoral Researcher, Advisor Dr. Samuel Kaski

Education

Purdue University

PhD Statistics, Advisor: Dr. Anindya Bhadra Universidad de Costa Rica BS Actuarial Science

Universidad de Costa Rica **BS** Pure Mathematics

Research Interests 1

• High dimensional data

- Heavy tails
- Bayesian inference
- Gaussian processes
- Computational methods
- Causal inference

Publications

Preprints

- » Loría, J., Bhadra A. (2023+), Posterior Inference on Shallow Infinitely Wide Bayesian Neural Networks under Weights with Unbounded Variance (submitted) [arxiv] [github]
- » Fernández-Loría, C, Loría, J. (2023+), Causal Scoring: A Framework for Effect Estimation, Effect Ordering, and Effect Classification (submitted) [arxiv]

Publications

- » Loría, J., Bhadra, A. (2024) SURE-tuned bridge regression. Statistics and Computing 34, 30. [doi link] [github]
- » Víguez, J. J., Víguez, 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

| Somos Purdue Award recognition of the commitment to excellence and for leading with <i>ganas</i> at Purdue University. | Class of 2024 |
|--|-----------------------------|
| Bravo Award one time staff award | Spring 2024 |
| Ross-Lynn Research Scholar Grant provides funding for notable graduate students | Spring 2024 |
| Fully funded assistance to workshop on Bayesian Statistics and Statistical Learning IMSI, Illinois, USA | December 2023 |
| Department of Statistics Travel Award | Summer 2023 |
| Department of Statistics Teaching Academy Associate Nominee | Spring 2023 |
| Emily and Paul Kidwell graduate student excellence Award given to graduate students in the Department of Statistics in Purdue University interested in careers i | Spring 2022 in academia. |

O /lorial ✓ loria@purdue.edu in /jorge-loría 😵 loriaj.github.io/

2019 - 2024West Lafayette, Indiana, USA 2014 - 2017 San José, Costa Rica 2015 - 2019 San José, Costa Rica

Starting June 2024 Espoo, Finland

| Jorge Loría PhD in Statistics | | ✓ loria@purdue.edu⊘ loriaj.github.io/ |
|---|---|--|
| Bob and Marjorie McLean Scholarship given to distinguished graduate students of the Department of Statistics in Pur | | mers 2020 and 2021 |
| Bronze Medal awarded in Competencia Iberoamericana Interuniversitaria de Matemáticas | | 2015 |
| Honorable Mention awarded in Competencia Iberoamericana Interuniversitaria de Matemáticas | | 2014 |
| 🗣 Talks and Posters Presented | | |
| SURE-tuned Bridge Regression Contributed Paper in Joint Statistical Meeting | | August 7th, 2023 Toronto, Canada |
| SURE-tuned Bridge Regression Contributed talk in XVI Latin American Congress of Probability and Mathematical Statistics | ; | July 10th, 2023 São Paulo, Brazil |
| SURE-tuned Bridge Regression | | May 26th, 2023 |

Learner Culture and Perceptions of Social Media Applications and Learning Management Systems for Lan- April 2023

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

Indiana, USA

April 2023

Illinois, USA

Illinois, USA

October 2022

Indiana, USA

April 2023

Online

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

Invited talk in a weekly colloquium at CIMPA Universidad de Costa Rica.

Paper session American Educational Research Association (AERA)

Learning the Ranking of Causal Effects with Confounded Data

Research Experience

Flash talk in INFORMS

SURE-tuned Bridge Regression

Purdue University

guage Learning

Round table in AERA

| - Research Assistant to Dr Anindya Bhadra in the project Inference in Infinite Width Neural Networks with Infinite Variance | Spring 2022 and Fall 2023 |
|---|---------------------------------------|
| - Research Assistant to Dr Arman Sabbaghi designing experiments and evaluating results for refinement of nanotellurene thickness | Fall 2020-Summer 2021 |
| - Team leader in Statistics for the Community investigated the effects of having a bicycle to enable access to charity locations for impov LifeCycle program (<i>voluntary</i>). | 2019-2021 erished people, with the |
| 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 |
| - Research Assistant to Dr Juan José Víquez | 2015 |
| st implementing a multivariate Markov chains model for the projection of public universities | in Costa Rica |

Teaching Experience

PhD in Statistics **Purdue University**

Instructor

Instructor

» 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

Jorge Loría

Fall 2021 – Summer 2022, Summer 2023 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

Teaching Assistant

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

Universidad de Costa Rica

Instructor

San José, Costa Rica

Fall 2019 - Spring 2021

Indiana. United States

» 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

| 🛱 Service and Leaders | hip | | |
|---------------------------|---|------------------|--|
| Spanish Native | English Advanced | Portuguese Basic | |
| Communication | | | |
| Actuarial Model Progran | San José Costa Ricc | | |
| Quanto Soluciones S. | San José Costa Rica January 2017 – July 2018 | | |
| Financial Risk Analyst, a | | | |
| Banco Promérica | January 2019 – July 2019 | | |

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

Indiana, USA 2021-2024 Indiana, USA

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Fall 2022 Indiana, United States

Fall of 2017 & 2018