Marcus L. Nascimento

Research Department José Luiz Egydio Setúbal Foundation São Paulo, SP 01228-200, Brazil marcus.gerardus@fundacaojles.org.br github.com/marcuslavagnole

Professional Experience

José Luiz Egydio Setúbal Foundation

Research Scientist

Rio de Janeiro, Brazil

Rio de Janeiro City Hall Advisor

2021–Current

São Paulo, Brazil

2023-Current

Accenture

Data Science Analyst

2018-2019

Accenture

Rio de Janeiro, Brazil

Rio de Janeiro, Brazil

Data Science Assistant

2015

EDUCATION

Federal University of Rio de Janeiro

Rio de Janeiro, Brazil

D.Sc. in Statistics

2019-2024

- Dissertation: Bayesian quantile regression analysis of complex survey data under informative sampling.

Federal University of Rio de Janeiro

Rio de Janeiro, Brazil

M.Sc. in Statistics

2016-2017

- Dissertation: Bayesian inference for finite mixture models of asymmetric distributions.

Federal University of Rio de Janeiro

Rio de Janeiro, Brazil

B.Sc. in Actuarial Science

2011 - 2015

Research Interests

- Method: survey analysis, quantile regression, causal inference with observational data
- Application: health and social sciences

OTHER EXPERIENCE

Federal University of Rio de Janeiro

Rio de Janeiro, Brazil

Research Assistant

2023

- Project: Machine learning methods for predicting willingness to pay for tax debtors in Rio de Janeiro.

Getulio Vargas Foundation

Rio de Janeiro, Brazil

Research Assistant

2022-2023

- Project: Machine learning methods for predicting preventable neonatal mortality in Brazil.

Institute for Applied Economic Research

Research Assistant

Project: Economic Evaluation of Social Programs.

Rio de Janeiro, Brazil 2019–2020

Rio de Janeiro, Brazil

2017

Institute for Applied Economic Research

Research Assistant

- Project: The economic impact of broadband expansion in Brazilian municipalities.

Work in Progress

Under review

Nascimento, Marcus L. and Kelly M. Gonçalves. "A Bayesian approach to multiple-output quantile regression analysis under informative sampling".

Ramos, Antonio P., Fábio Caldieraro, Marcus L. Nascimento, and Raphael Saldanha. "Reducing Inequalities by Using an Unbiased Machine Learning Approach to Identify Births with the Highest Risk of Preventable Neonatal Deaths".

IN PREPARATION

Ramos, Antonio P., Fabio Caldierado, Chad Hazlett, and Marcus L. Nascimento. "One pandemic is not like the other: Contrasting COVID-19 against a New Pandemic."

PUBLICATIONS

STATISTICS

Nascimento, Marcus L. and Kelly M. Gonçalves. "Bayesian quantile regression models for complex survey data under informative sampling". *Journal of Survey Statistics and Methodology*, vol. 12, no. 4, 2024, pp. 1105–1130.

Cross-disciplinary

Nascimento, Marcus L. and Leonardo M. Barreto. "Improving crime count forecasts in the city of Rio de Janeiro via reconciliation". Security Journal, to appear.

Pre-Doctoral

Nascimento, Marcus L., Kelly M. Gonçalves, and Mario Jorge Mendonça. "Spatio-temporal instrumental variables regression with missing data: A Bayesian approach". *Computational Economics*, vol. 62, no. 1, 2023, pp. 27–49.

Nascimento, Marcus L. and Carlos Antonio Abanto-Valle. "Flexible robust mixture regression modeling". *REVSTAT, Statistical Journal*, vol. 20, no. 1, 2022, pp. 101–115.

Nascimento, Marcus L. and Kelly M. Gonçalves. "Bayesian variable selection in quantile regression with random effects: an application to Municipal Human Development Index". *Journal of Applied Statistics*, vol. 49, no. 13, 2022, pp. 3436–3450.

Nascimento, Marcus L., Ralph S. Silva, Mario Jorge Mendonça, and Amaro O. Pereira. "Estimating the efficiency of Brazilian electricity distribution utilities". *Journal of Applied Statistics*, vol. 49, no. 8, 2022, pp. 2157–2166.

Nascimento, Marcus L., Kalinca L. Becker, and Mario Jorge Mendonça. "Implications of Brazilian Institutional Guidelines on Educational Efficiency". *Economía, the journal of LACEA*, vol. 21, no. 1, 2020, pp. 147–168.