# Guilherme Jardim Duarte

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#### Education

Ph.D. in Decisions, The Wharton School of the University of Pennsylvania, Expected 2025.
 Research: Causality, Computational Social Sciences, Machine Learning, Statistical Learning.

• BA in Law, State University of São Paulo, 2010.

# **Professional Experience**

Data Editor: News website Jota, 2017–2019.
 Write and plan data-driven news stories on topics including judiciary, legislative, and electoral polls; analyze marketing data.

Data Scientist: Itaú Bank, 2017.
 Marketing and credit modelling with random forests and gradient boosting; large-scale data engineering

• Data Scientist: Newspaper *O Estado de S. Paulo*. 2015-2017.

Data analysis and reporting on topics including the Panama Papers.

#### Research

#### Peer-Reviewed Articles

- congressbr: An R Package for Analysing Data from Brazil's Chamber of Deputies and Federal Senate. Joint
  with Robert McDonnell and Danilo Freire. Latin American Research Review, 2019, 54 (2).
- An Automated Approach to Causal Inference in Discrete Settings. Joint with Noam Finkelstein, Dean Knox, Jonathan Mummolo, and Ilya Shpitser. 2023. (Conditionally Accepted). Journal of American Statistical Association.

#### In Progress

- Imperfect Data and Optimal Allocation of Data-Collection Resources. Joint with Dean Knox. 2023
- Transportability Sharp Bounds. 2023.
- Learning From Imperfect Identification Automating Causal Inference When Classic Assumptions Fail. Joint with Luke Keele, Dean Knox, and Jonathan Mummolo. 2022.
- Structural Causal Models and Factorial Experiments: Identification Problems and Applications in Social Sciences. 2020.

#### Software

- autobounds. python package that automatizes the solution of partial identification problems in causal inference. Joint with Noam Finkelstein, Dean Knox, Jonathan Mummolo, Ilya Shpitser.
- congressbr. R package that returns tidy data from the APIs of the Brazilian Federal Senate and Chamber of Deputies. Joint with Robert McDonnell and Danilo Freire.

# Skills

# Software

• python, R, c++

# Languages

• Portuguese (native), English (fluent), Spanish (intermediate)

# References

- Dean Knox. Assistant Professor, OID Wharton. Email: dcknox@upenn.edu
- $\bullet \ \ Jonathan\ Mummolo.\ Assistant\ Professor, Department\ of\ Politics-Princeton\ University.\ Email: jmummolo@princeton.edu$

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