# CARLOS CINELLI

Assistant Professor, Department of Statistics, University of Washington, Seattle Website: carloscinelli.com — Email: cinelli@uw.edu — Phone: 310-467-4375

# **EMPLOYMENT**

University of Washington, Seattle

- 2023- Director of Consulting, Center for Statistics and the Social Sciences
- 2023- Affiliate Faculty, eScience Institute
- 2021- Affiliate Faculty, Center for Statistics and the Social Sciences
- 2021- Assistant Professor, Department of Statistics

CENTRAL BANK OF BRAZIL

- 2014-2016 Economist, Systemic Risk Division
- 2012-2014 Economist, Foreign Investment Division

# **EDUCATION**

- 2016-2021 PHD, Statistics, University of California, Los Angeles (UCLA)
- 2010-2012 MSc, Economics, University of Brasilia (UnB)

## PEER REVIEWED PUBLICATIONS

- 2022+ 13. Carlos Cinelli, Andrew Forney and Judea Pearl. "A Crash Course in Good and Bad Controls." Sociological Methods and Research, 2022+.
- 2022 12. Lang Liu, Carlos Cinelli, and Zaid Harchaoui. "Orthogonal Statistical Learning with Self-Concordant Loss." *Annual Conference on Learning Theory (COLT)*, 2022.
- 2022 11. Carlos Cinelli, N. LaPierre, B. Hill, S. Sankararaman and E. Eskin. "Robust Mendelian randomization in the presence of residual population stratification, batch effects and horizontal pleiotropy." Nature Communications, 2022.
- 2021 10. Carlos Cinelli and Judea Pearl. "Generalizing Experimental Results by Leveraging Knowledge of Mechanisms." *European Journal of Epidemiology*, 2021.
- 9. Chi Zhang, Carlos Cinelli, Bryant Chen and Judea Pearl. "Exploiting Equality Constraints in Causal Inference." *International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2021.
- 8. **Carlos Cinelli** and Chad Hazlett. "Making Sense of Sensitivity: Extending Omitted Variable Bias." *Journal of the Royal Statistical Society, Series B (Statistical Methodology)*, 2020.
- 7. Daniel Kumor, Carlos Cinelli, and Elias Bareinboim. "Efficient Identification in Linear Structural Causal Models with Auxiliary Cutsets." *International Conference of Machine Learning (ICML)*, 2020.

- 6. Carlos Cinelli, D. Kumor, B. Chen, J. Pearl and E. Bareinboim. "Sensitivity Analysis of Linear Structural Causal Models." *International Conference of Machine Learning (ICML)*, 2019.
- 5. Carlos Cinelli and Judea Pearl. "On the utility of causal diagrams in modeling attrition: a practical example." *Epidemiology*, 29, e50-e51, 2018.

PRE-PHD PUBLICATIONS

- 4. Carlos Cinelli and Rogerio Arthmar. "The debating tradition in Britain and the new political economy: William Thompson and John Stuart Mill at the London Co-operative Society in 1825."

  Nova Economia, v.28 (2), p.609-636, 2018.
- 3. Rogerio Arthmar and Carlos Cinelli (in portuguese). "The classical economics between laissez-faire and socialism." *EconomiA*, v. 14, p. 227-252, 2013.
- 2011 2. Carlos Cinelli (in portuguese). "Voluntary transfers and municipal corruption in Brazil: preliminary evidence from the irregular accounts registry of the Federal Court of Accounts." *Revista Economia e Tecnologia*, v. 7, p. 89-97, 2011.
- 1. Carlos Cinelli and Rogerio Arthmar (in portuguese). "When the classical liberal and the socialist confront each other: Bastiat, Proudhon and capital rent." *Nova Economia*, v. 20, p. 509-541, 2010.

# Pre-Prints & Manuscripts under review

Nicholas Irons, Carlos Cinelli. "Causally Sound Priors for Binary Experiments." Submitted.

Victor Chernozhukov, Carlos Cinelli, Whitney Newey, Amit Sharma, and Vasilis Syrgkanis. "Omitted Variable Bias in Machine Learned Causal Models." *Submitted*.

Carlos Cinelli and Chad Hazlett. "An Omitted Variable Bias Framework for Sensitivity Analysis of Instrumental Variables." *Submitted*.

Carlos Cinelli, Jeremy Ferwerda and Chad Hazlett. "sensemakr: Sensitivity Analysis Tools for OLS in R and Stata." *Submitted*.

## GRANTS & AWARDS

- 2021-2024 Sloan Foundation, Interactive Causal Learning Conference. Role: co-PI, with Michael Ryall and Kevin Bryan. Amount: \$249, 100.
- 2020 UCLA Dissertation Year Fellowship (DYF) ( $\approx $37,000$ )

# SOFTWARE

Web Apps

Regression sensitivity analysis: web app with suite of sensitivity analysis tools for OLS.

#### STATA MODULES

sensemakr: Sensitivity Analysis Tools for OLS (stata)

#### PYTHON PACKAGES

sensemakr: Sensitivity Analysis Tools for OLS (Python)

# **R PACKAGES**

sensemakr: Sensitivity Analysis Tools for OLS

mrsensemakr: Sensitivity Analysis Tools Mendelian Randomization

dml.sensemakr: Sensitivity Analysis tools for Causal Machine Learning

generalizing: Generalizing Experimental Results By Leveraging Knowledge of Mechanisms

NetworkRiskMeasures: risk measures for (financial) networks

benford.analysis: Benford's law for data validation and forensic analytics

sValues: measures of sturdiness of regression coefficients

# Conferences, Seminars & Invited Talks

2023	McMaster University, Centre for social research innovation, Spark Talk, Online
2023	American Political Science Association Annual Meeting (APSA 2023), Los Angeles, California
2023	RAND Corporation, Center for Causal Inference Symposium, Online
2023	Joint Statistical Meetings (JSM 2023), Toronto, Canada
2023	New Researchers Conference (NRC 2023) Toronto, Canada
2023	European Meeting of Statisticians (EMS 2023), Warsaw, Poland
2023	Western North American Region of The Int. Biometric Society (WNAR 2023), Anchorage, Alaska
2023	Causality in Practice, Institute Pascal, Saclay, France
2023	Aarhus University, Centre of Integrative Business Psychology, Online
2023	American Causal Inference Conference (ACIC 2023), Austin, Texas
2023	AirBnB, Data Science Seminar, Online
2023	University of Washington, Stat. and ML Approaches for the Social Sciences, Online
2022	Int. Conference on Computational and Methodological Statistics (CMStatistics 2022), Online
2022	Stanford, Stanford Political Methodology Workshop, Palo Alto, California
2022	Causal Data Science Meeting (CDSM 2022), Online
2022	University of Jyvoaskyla, Statistics Seminar, Online
2022	Iowa State University, Department of Economics Seminar, Ames, Iowa
2022	ETH Zurich, Online Seminar in Economics and Data Science, Online
2022	Joint Statistical Meetings (JSM 2022), Washington D.C
2022	Federal University of Pernambuco (UFPE), Seminar at Lab. Ciência Política Comp. e Exp., Online
2022	Annual Meeting of the Society for Political Methodology (PolMeth XXXIX), Online
2022	NuBank, Causal Inference Meetup, Online

- 2022 University of Bristol, Integrative Epidemiology Unit, Online
- 2022 American Causal Inference Conference (ACIC 2022), Berkeley, California
- 2022 International Workshop on Interactive Causal Learning (ICL 2022), Washington D.C.
- 2022 MIT, Department of Economics, Invited Lecture, Online
- 2022 University of Washington, Department of Economics, Econometrics Seminar, Online
- 2021 University of Washington, Department of Biostatistics Seminar, Online
- 2021 Carnegie Mellon University, Machine Learning (Duolingo) Seminar, Online
- 2021 Causal Data Science Meeting (CDSM 2021), Online
- 2021 London School of Economics, Department of Methodology Seminar, Online
- 2021 University of Washington, CSSS Seminar, Seattle, Washington
- 2021 Online Causal Inference Seminar (OCIS), Online
- 2021 Pacific Causal Inference Conference 2021, Online
- 2021 International Conference on Knowledge Discovery & Data Mining (KDD 2021), Online
- 2021 Joint Statistical Meetings (JSM 2021), Online
- 2021 European Causal Inference Meeting (EuroCIM 2021), Online
- Federal University of Pelotas (UFPel), Economics Seminar, Online
- 2021 Annual Meeting of the Society for Epidemiologic Research (SER 2021), Online
- 2020 Ecole Polytechnique, France, Online
- 2020 Healthdata Bootcamp, Online
- 2020 Causal Data Science Meeting (CDSM 2020), Online
- Annual Meeting of the American Society of Human Genetics (ASHG 2020), Online
- 2020 Joint Statistical Meetings (JSM 2020), Online
- 2020 Annual Meeting of the Society for Political Methodology (PolMeth XXXVII), Online
- 2020 International Conference on Machine Learning (ICML 2020), Online
- 2020 useR! 2020, Online
- 2020 American Causal Inference Conference (ACIC 2020), Austin, Texas [Postponed due to COVID-19]
- 2019 Innovative Methods with Big Data and Artificial Intelligence (IM DATA 2019), Pasadena, California
- 2019 Southern California Methods Conference (SoCal 2019), Riverside, California
- 2019 University of Southern California, Los Angeles, California
- 2019 Joint Statistical Meetings (JSM 2019), Denver, Colorado
- 2019 International Conference of Machine Learning (ICML 2019), Long Beach, California
- 2019 RAND Corporation, Center for Causal Inference Seminar, Santa Monica, California
- 2019 University of São Paulo (USP), Statistics Seminar, São Paulo, Brazil
- 2019 Insper, Data Science Seminar, São Paulo, Brazil
- Joint Statistical Meetings (JSM 2018), Vancouver, British Columbia, Canada
- 2018 Annual Meeting of the Society for Political Methodology (PolMeth XXXV), BYU, Provo, Utah
- 2017 BITSS Annual Meeting, Berkeley, California
- 2017 Causal Inference from Neuroscience to Computer Science, UCLA, Los Angeles, California
- 2017 Joint Statistical Meetings (JSM 2017), Baltimore, Maryland
- 2016 useR! 2016, Stanford, California
- 2016 University of Brasilia (UnB), Statistics Seminar, Brasília, Brazil
- 2015 Model Development, Validation and Model Risk Management, Santiago, Chile
- 2015 useR! 2015, Aalborg, Denmark
- 2015 Workshop of Systemic Risk and Financial Networks, IPAM/UCLA, Los Angeles, California
- 2014 Catholic University of Brasilia (UCB), Economics Seminar, Brasília, Brazil

2014	useR! 2014, Los Angeles, California
2013	26th Annual Conference of the History of Economic Thought Society, Perth, Australia
2012	XL National Meeting of Economics, Porto de Galinhas, Brazil
2012	IV International Conference of Economic History, São Paulo, Brazil
2012	XVII National Meeting of Political Economy, Rio de Janeiro, Brazil
2011	XVII Brazilian Symposium on Water Resources, Maceió, Brazil
2011	II Meeting of Economics of Espirito Santo, Vitória, Brazil
2010	XVII National Meeting of Political Economy, São Luís, Brazil
2009	XXXVII National Meeting of Economics, Foz do Iguaçu, Brazil

# ACADEMIC SERVICE

Editorial Board

2021- Associate Editor, Journal of Causal Inference

Manuscript Referee

JRSS-B, JASA, Biometrika, Statistical Science, International Journal of Biostatistics, Journal of Applied Econometrics, Econometrica, Econometric Reviews, Journal of Political Economy, Journal of Causal Inference, ICML, Neurips, AAAI, AISTATS, CLeaR, Nature Climate Change, Science Advances, Political Analysis, Collabra: Psychology, Epidemiology, European Journal of Epidemiology, International Journal of Epidemiology, American Journal of Epidemiology, PCORI, Annals of Operations Research, Nova Economia, Cambridge University Press.

Conferences, Seminars & Workshops

2023 *Co-Chair*, Interactive Causal Learning Conference, Boca Raton, Florida 2022 *Co-Chair*, Interactive Causal Learning Conference, Washington D.C.

# TEACHING EXPERIENCE

2021- University of Washington, Seattle

STATS 504 — Applied Regression (Graduate)

STAT 564 — Bayesian Statistics for the Social Sciences (Graduate)

STATS 591 — The Structural and Counterfactual Theory of Causation (Graduate)

STAT 396 — Finite Markov Chains and Monte-Carlo Methods (Undergraduate Upper Division)

2016-2020 University of California, Los Angeles

STATS 256 — Causality (Graduate) / Special Reader

STATS 100A — Introduction to Probability Theory (Undergraduate Upper Division) / TA

STATS 10 — Introduction to Statistical Reasoning (Undergraduate Lower Division) / Reader

2012-2016 University of the Central Bank of Brazil

Statistics and R programming / Full Course Development and Professor

2015-2016 Brazilian Institute of Research and Data Analysis

Introduction to programming with R / Full Course Development and Professor

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