# Carlos Cinelli

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## Education

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

## Employment

2014-2016  *Economist*, Central Bank of Brazil, Systemic Risk Division
2012-2014  *Economist*, Central Bank of Brazil, Foreign Investment Division

## Peer Reviewed Publications

2020  8. **Carlos Cinelli** and Chad Hazlett. "Making Sense of Sensitivity: Extending Omitted Variable Bias". *Journal of Royal Statistical Society, Series B (Statistical Methodology)*, 2020.

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.

2019  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.

2018  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

2018  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.

2013  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.

2010  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

**Carlos Cinelli** and Judea Pearl. "Generalizing Experimental Results by Leveraging Knowledge of Mechanisms." *Revision requested.*

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

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

**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."

## Awards

2020        UCLA Dissertation Year Fellowship (DYF) ($\approx \$37,000$)

## Software

### Shiny Apps

Robustness Value Shiny App: suite of sensitivity analysis tools for OLS.

### R packages

sensemakr: Sensitivity Analysis Tools for OLS

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

2020        Joint Statistical Meetings (JSM 2020), Online
2020        Annual Meeting of the Society for Political Methodology (PolMeth XXXVII), Online
2020        useR! 2020, The R User Conference, 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

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| 2019 | Insper, Data Science Seminar, São Paulo, Brazil |
| 2018 | 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 System 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

Manuscript Referee: ICML, Neurips, Political Analysis, Journal of Causal Inference, Epidemiology, PCORI, Annals of Operations Research, Nova Economia.

## Teaching Experience

2016-2020 University of California, Los Angeles

STATS 256 — Causality (Graduate) / Special Reader
STATS 100A — Introduction to Probability Theory (Undergrad Upper Division) / TA
STATS 10 — Introduction to Statistical Reasoning (Undergrad 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

## Other Technical Work

2012-2016

Software for the Central Bank of Brazil: statistical modeling for foreign investment surveys, house market prediction, contagion, stress tests and systemic risk analysis.

2015    Financial Stability Report, Contagion on the Real Sector and Systemic Risk Analysis
2015    Census of Foreign Capital in Brazil
2014    Census of Foreign Capital in Brazil

## OTHER TRAINING

2013    Applied Bayesian Econometrics for Central Bankers, Bank of England, CCBS, London
2012    Balance of Payments and International Investment Statistics, CEMLA, Mexico City