

# Daniel Ober-Reynolds

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## EMPLOYMENT

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Bates White Economic Consulting  
Economist, Antitrust and Competition Practice

September 2024 to Present

## EDUCATION

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Ph.D. in Economics, University of California – Los Angeles  
Advisor: Andres Santos

June 2024

M.A. in Economics, University of California – Los Angeles

June 2020

B.S. *Summa Cum Laude*, Arizona State University  
Majors: B.S. Economics, B.A. Mathematics, B.A. Philosophy

May 2016

## RESEARCH

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### WORKING PAPERS

“Estimating Functionals of the Joint Distribution of Potential Outcomes with Optimal Transport”

**Abstract:** Many causal parameters depend on a moment of the joint distribution of potential outcomes. Such parameters are especially relevant in policy evaluation settings, where noncompliance is common and accommodated through the model of Imbens & Angrist (1994). This paper shows that the sharp identified set for these parameters is an interval with endpoints characterized by the value of optimal transport problems. Sample analogue estimators are proposed based on the dual problem of optimal transport. These estimators are  $\sqrt{n}$ -consistent and converge in distribution under mild assumptions. Inference procedures based on the bootstrap are straightforward and computationally convenient. The ideas and estimators are demonstrated in an application revisiting the National Supported Work Demonstration job training program. I find suggestive evidence that workers who would see below average earnings without treatment tend to see above average benefits from treatment.

“Robustness to Missing Data: Breakdown Point Analysis”

**Abstract:** Missing data is pervasive in econometric applications, and rarely is it plausible that the data are missing (completely) at random. This paper proposes a methodology for studying the robustness of results drawn from incomplete datasets. Selection is measured as the squared Hellinger divergence between the distributions of complete and incomplete observations, which has a natural interpretation. The *breakdown point* is defined as the minimal amount of selection needed to overturn a given result. Reporting point estimates and lower confidence intervals of the breakdown point is a simple, concise way to communicate a result’s robustness. An estimator of the breakdown point of results drawn from GMM models is proposed and shown  $\sqrt{n}$ -consistent and asymptotically normal under mild assumptions. Lower confidence intervals of the breakdown point are constructed with a simple bootstrap procedure. The paper concludes with a simulation study illustrating good finite sample performance.

## OTHER EXPERIENCE

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|                                  |                          |
|----------------------------------|--------------------------|
| Amazon                           |                          |
| Economist Intern                 | Summer 2021, Summer 2022 |
| UCLA                             |                          |
| Teaching Assistant               | March 2020 to June 2023  |
| Research Assistant               | May 2019 to March 2020   |
| Federal Reserve Bank of Richmond |                          |
| Research Associate               | June 2016 to August 2018 |

## TEACHING

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|   |                                   |
|---|-----------------------------------|
| Teaching Assistant at UCLA                          |                                   |
| Graduate Courses                                    |                                   |
| Econometrics II (ECON 203B)                         | Winter 2023                       |
| Undergraduate Courses                               |                                   |
| Introduction to Econometrics (ECON 103)             | Fall 2020, Winter 2021, Fall 2022 |
| Probability and Statistics for Economists (ECON 41) | Spring 2021, Spring 2023          |
| Microeconomic Theory (ECON 101)                     | Spring 2020                       |

## HONORS AND AWARDS

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|   |             |
|---|-------------|
| UCLA  |             |
| Dissertation Year Fellowship (DYF)                                | 2023-2024   |
| Graduate Research Mentorship (GRM) Fellowship                     | 2021-2022   |
| NSF Graduate Research Fellowship Program (GRFP) Honorable Mention | 2020        |
| University Fellowship   | 2018-2019   |
| ASU   |             |
| CLAS Dean's Medalist (Economics)                                  | Spring 2016 |
| JP Morgan Chase Scholar   | 2014        |
| Barrett, the Honors College                                       |             |

## OTHER

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|   |      |
|---|------|
| Seminars and Conferences                                  |      |
| Econometric Society North American Summer Meeting (NASM)  | 2023 |
| Software  |      |
| Python, MATLAB, R, Stata, L <sup>A</sup> T <sub>E</sub> X |      |