Raiden B. Hasegawa

Department of Statistics
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EDUCATION

2014-Present Ph.D., Statistics, The Wharton School, University of Pennsylvania
Dissertation title: *Sensitivity Analysis in the Presence of Heterogeneous and Potentially Unbounded Confounding*
Advisor: Professor Dylan S. Small

2012-2013 Additional graduate coursework, Scientific Computing, Courant Institute of Mathematical Sciences, New York University

2006-2010 B.A., *cum laude*, *Distinction in Major*, Economics, Yale University

TEACHING

2014-2018 Department of Statistics, The Wharton School, University of Pennsylvania *(TA)*
STAT 101 & 102: Introductory Business Statistics
STAT431: Mathematical Statistics
STAT471: Intermediate Statistics
STAT474: Modern Regression for Social, Behavioral and Biological Sciences
STAT613: Regression Analysis for Business

2016-2018 Wharton Moneyball Academy *(Graduate Instructor)*
Sports data science summer course for advanced high school students.

PUBLICATIONS (⋆ denotes co-first authors, equal contributions)

- **Hasegawa, Raiden B.**, Small, Dylan S., and Webster, Daniel W. (2018+). Bracketing in the Comparative Interrupted Time-Series Design to Address Concerns about History Interacting with Group: Evaluating Missouri Handgun Purchaser Law. *Epidemiology*, to appear.
- Fogarty, Colin B.⋆ and **Hasegawa, Raiden B.**⋆ (2018+). Extended sensitivity analysis for heterogeneous unmeasured confounding with an application to sibling studies of returns to education. *Annals of Applied Statistics*, to appear.
- Deshpande, Sameer K.⋆, **Hasegawa, Raiden B.**⋆ et al.(2017) Association of Playing High School Football with Cognition and Mental Health Later in Life. *JAMA Neurology*, 74, 8, 909-918.
- **Hasegawa, Raiden B.** and Small, Dylan S. (2017). Sensitivity Analysis for Matched Pair Studies of Binary Data: From Worst Case to Average Case Analysis. *Biometrics*, 73, 4, 1424-1432.
- Del Negro, Marco, **Hasegawa, Raiden B.**, and Schorfheide, Frank (2016). Dynamic Prediction Pools: An Investigation of Financial Frictions and Forecasting Performance. *Journal of Econometrics*, 192, 22, 391-405.

SUBMITTED PAPERS

- **Hasegawa, Raiden B.**, Deshpande, Sameer K., Small, Dylan S., and Rosenbaum, Paul R. (2018+). Causal Inference with Two Versions of Treatment. *Revision Invited*.

PAPERS IN PREPARATION

- **Hasegawa, Raiden B.**, Small, Dylan S., and Ter Kuile, Feiko O. Estimating Treatment Efficacy against Malaria in the Absence of a Gold-Standard Case Definition.
- Keele, Luke J. and **Hasegawa, Raiden B.**. Assessing the Effects of Voter Identification Laws Using Bracketing and Differences-in-Differences.
- **Hasegawa, Raiden B.**. Covariance Adjustment in Matched Pair Observational Studies: Choosing Adjustment Algorithms for Power and Design Sensitivity.

RESEARCH INTERESTS

causal inference • design and analysis of observational studies • sensitivity analysis • evidence factors and multiple comparisons • statistical applications in social and biomedical sciences

CONFERENCE PRESENTATIONS AND POSTERS

- *Effects of Playing High School Football on Mental Health in Early Adulthood: An Observational Study* ■ Add Health Users Conference, Jul 2018 @ NIH
- *Extended Sensitivity Analysis for Heterogeneous Unmeasured Confounding with an Application to Sibling Studies of Returns to Education* ■ Atlantic Causal Inference Conference, May 2018 @ CMU

AWARDS

– National Science Foundation Travel Award, 2018
Awarded to the five best junior researcher posters at the 2018 Atlantic Causal Inference Conference; for the poster *Extended Sensitivity Analysis for Heterogeneous Unmeasured Confounding with an Application to Sibling Studies of Returns to Education*

CONSULTING EXPERIENCE

2016-2017 Race-based bias in personal property insurance payouts case, *Statistical Expert*
– Expert report led to a "fair and balanced settlement."
– Methods: clusted logistic regression used to assess the correlation between racial composition and proportion of insurance claims outstanding by zipcode-year.

2016 Electricians' union discrimination case, *Statistical Expert*
– Methods: robust permutational tests used to assess the possible presence of racial bias in the "quality" of jobs assigned by an electricians' union to its members.

WORK EXPERIENCE

2012-2014 Federal Reserve Bank of New York, Research Associate
Research Areas: Bayesian macroeconomic forecasting, Bayesian VAR models, particle filtering, parallel scientific computing
Programming Languages: Matlab, Stata and Python, Bash and Awk scripting

2011-2012 GreenOrder, Sustainability Analyst
Provided management and strategy consulting services to Fortune 500 companies with a focus on sustainability

2010-2011 DC Energy, Investment Analyst
Designed, tested and implemented quantitative trading strategies in wholesale power markets.
Programming Languages: PHP, MySQL, R

PROGRAMMING EXPERIENCE

In order of proficiency/experience: R, Matlab, Python, C++, Haskell, SQL, Bash, Stata