Raiden B. Hasegawa

Department of Statistics The Wharton School University of Pennsylvania

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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 Poten-

tially Unbounded Confounding Advisor: Professor Dylan S. Small

2012-2013 Additional graduate coursework, Scientific Computing, Courant Institute of Math-

ematical 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)

- 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 ccase 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., 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. *Revision Submitted*.

• 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.

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

- Tom R. Ten Have Award (Honorable Mention), 2018 Awarded at the 2018 Atlantic Causal Inference Conference for "exceptionally creative or skillful research on causal inference" for the papers "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