#### Jeremiah Jones

# Contact

Information Department of Biostatistics And Computational Biology

School of Medicine and Dentistry

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### Professional Experience

2015-2017

LabAnswer, Inc. (Acquired, Deloitte 2017) Informatics Consultant, Software Development and Support

#### **EDUCATION**

PhD Candidate, University of Rochester

Department of Biostatistics and Computational Biology, August 2017 to Present

Title: The Partial Linear Model in Causal Inference:

Estimation, Selection and Inference Leveraging Machine Learning

B.S., Stetson University

Department of Mathematics and Computer Science, August 2011 to May 2015

### RESEARCH Interests

Variable Selection, Post-Selection Inference, Causal Inference, Mediation Analysis, Precision Medicine, Semiparametric Theory, High-dimensional Analyses.

#### **PUBLICATIONS**

- Jones, J., Ertefaie, A., & Strawderman, R.L. (2021). Causal Mediation Analysis: Selection with Asymptotically Valid Inference. arXiv:2110.06127. (under review)
- Jones, J., Ertefaie, A., & Strawderman, R.L. (2021). Post-Selection Inference for Individualized Treatment Rules with Nonparametric Confounding Control. In *Handbook of Precision Medicine*. (accepted)
- Jones, J., Ertefaie, A. & Shortreed, S.M. (2022). Rejoinder to "Reader reaction to 'Outcome-adaptive Lasso: Variable selection for causal inference' by Shortreed and Ertefaie (2017)". *Biometrics*, 1–5. https://doi.org/10.1111/biom.13681
- Yaeger, J.P., **Jones, J.**, Ertefaie, A., Caserta, M. T., van Wijngaarden, E., & Fiscella, K. (2022). Refinement and Validation of a Clinical-Based Approach to Evaluate Young Febrile Infants. *Hospital Pediatrics*, 12(4), 399-407.
- Yaeger, J. P., Lu, J., **Jones, J.**, Ertefaie, A., Fiscella, K., & Gildea, D. (2022). Derivation of a natural language processing algorithm to identify febrile infants. *Journal of Hospital Medicine*, 17(1), 11–18. https://doi.org/10.1002/jhm.2732
- Yaeger, J. P., **Jones, J.**, Ertefaie, A., Caserta, M. T., van Wijngaarden, E., & Fiscella, K. (2021). Using clinical history factors to identify bacterial infections in young febrile infants. *The Journal of Pediatrics*, 232, 192-199. https://doi.org/10.1016/j.jpeds.2020.12.079

# Conference Presentations

- ENAR, Hybrid, 2022 and JSM, Washington, DC, 2022 (upcoming). Casual Mediation Analysis: Selection with Asymptotically Valid Inference.
- (Invited) EcoStat, Online, 2021. Inference after Model Selection in Robust Q-learning.
- ENAR, Online, 2021. Post-selection Inference via the Lasso in Robust Q-Learning.
- 22nd Annual NINDS Udall Centers Meeting, Online, 2020. Treatment characterization and decision-making strategy for first-line pharmacological motor symptomatic therapies in Parkinson's disease.
- ENAR, Philadelphia, PA, 2019. Mediator Selection with Nonparametric Confounding Control.

# Talks and Posters

- American Causal Inference Conference, Berkeley, CA, 2022. Casual Mediation Analysis: Selection with Asymptotically Valid Inference.
- (Internal) UR School of Medicine and Dentistry Visit Weekend, Online, 2021. *Understanding causation with statistical learning: Mediation analysis with the partial linear model.*
- National Studies on Air Pollution and Health Working Group, Harvard University, Online, 2021. Challenges in Assessing Medicare Hospitalization-Mediated Effect of PM2.5 on Mortality.
- (Internal) UR School of Medicine and Dentistry Visit Weekend, Rochester, NY, 2021. Personalized Medicine for Parkinson's disease. A Statistical Machine-Learning Approach.
- (Internal) UR Neurology Working Group, Online, 2021. Individualized first-line treatment strategies for the motor symptoms of Parkinson's disease.
- (Internal) UR School of Medicine and Dentistry Visit Weekend, Rochester, NY, 2020. Personalized Medicine for Parkinson's disease. A Statistical Machine-Learning Approach.
- UpSTAT 2018, Rochester, NY. A brief history of crime in Rochester, NY.

# Honors and Awards

- 2022 ENAR Distinguished Student Paper Award
- 2020-2021 William Jackson Hall Graduate Student Fellowship.
- Trainee Rapid Research Presenter Nominee, UR-Udall Centers Virtual Meeting + Symposium, 2020.
- NSF Graduate Research Fellowship Honorable Mention, 2019.
- UpStat 2018 Data Science Team Competition, Gold Medal, 2018.
- Ashcraft Award for the Outstanding Junior in Mathematics, 2014.

# VISITING SCHOLAR

Department of Epidemiology, Harvard School of Public Health, Aug 2020-Present.

### TEACHING AND ASSISTANTSHIP

- Spring 2022, Statistical Inference II, BST 412 (Lecture on Selective Inferece).
- Fall 2020, Semiparametric Theory, BST 512 (Lecture on Semiparametric Efficiency of the Partial Linear Model)
- Spring 2019, Intermediate Statistical and Computational Methods, CSC 265
- Fall 2017, Introduction to Biostatistics, BST 463

#### MENTORSHIP

• Jobi Jose (B.S. student, 2020-2022, University of Rochester)