Jeremiah Jones

Contact Information

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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)
- 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*. (accepted)
- 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. *Casual Mediation Analysis: Selection with Asymptotically Valid Inference*. (upcoming)

- (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

- (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

- 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-present, University of Rochester)