Spencer Woody

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EDUCATION

Ph.D. in Statistics

Aug 2016 – Aug 2020 (expected)

University of Texas at Austin

Dissertation Committee: James G. Scott (co-advisor), Jared S. Murray (co-advisor),

Carlos M. Carvalho, Corwin Zigler, and Peter Hoff

B.S. in Economics and Statistical Science (dual major) Duke University, Durham, NC

Aug 2011 – May 2015

PRE-PRINTS & PAPERS UNDER REVIEW

- Woody, Spencer, Mauricio Garcia Tec, Maytal Dahan, Kelly Gaither, Spencer Fox, Lauren Ancel Meyers, and James G. Scott. "Projections for first-wave COVID-19 deaths across the US using social-distancing measures derived from mobile phones" *medRxiv* 2020.04.16.20068163; doi: https://doi.org/10.1101/2020.04.16.20068163
- Yeager, David S., Jamie M. Carroll, Jenny Buontempo, Andrei Cimpian, Spencer Woody, Robert Crosnoe, Chandra Muller, Jared Murray, Pratik Mhatre, Nicole Kersting, Christopher Hulleman, Molly Kudym, Mary Murphy, Angela Duckworth, Gregory Walton, and Carol S. Dweck. "Teacher Mindsets Help Explain Where a Growth Mindset Intervention Does and Doesn't Work." Under review. 2020.
- Woody, Spencer, Oscar Hernan Madrid Padilla, and James G. Scott. "Optimal post-selection inference for sparse signals: a nonparametric empirical-Bayes approach." *arXiv preprint. arXiv:1810.11042* (2020). Under revision for publication at *Biometrika*.
- Woody, Spencer, Carlos M. Carvalho, and Jared S. Murray. "Bayesian inference for treatment effects under nested subsets of controls." *arXiv preprint. arXiv:2001.07256* (2020).
- Woody, Spencer, Novin Ghaffari, and Lauren Hund. "Bayesian Model Calibration for Extrapolative Prediction via Gibbs Posteriors." *arXiv preprint. arXiv:1909.05428* (2019).

PEER-REVIEWED JOURNAL ARTICLES

- Woody, Spencer, Carlos M. Carvalho, and Jared S. Murray. "Model interpretation through lower-dimensional posterior summarization." arXiv:1905.07103 *Journal of Computational and Graphical Statistics*. 2020 (to appear).
- Shen, C. Y., **S. Woody**, S. Fuller, L. K. Grange, K. D. Tran, J. G. Lee, D. O. Kikkawa, and J. E. Lee. "Elevated intraocular pressure in burn patients undergoing fluid resuscitation: an opportunity to avoid orbital compartment syndrome." *Journal of Academic Ophthalmology* (to appear). (2020).

- Feider, Clara L., **Spencer Woody**, Suzanne Ledet, Jialing Zhang, Katherine Sebastian, Michael T. Breen, and Livia S. Eberlin. "Molecular Imaging of Endometriosis Tissues using Desorption Electrospray Ionization Mass Spectrometry." *Scientific Reports* **9**, 15690 (2019).
- DeHoog, Rachel J., Jialing Zhang, Elizabeth Alore, John Q. Lin, Wendong Yu, **Spencer Woody**, Christopher Almendariz, Monica Lin, Anton F. Engelsman, Stan B. Sidhu, Robert Tibshirani, James Suliburk, and Livia S. Eberlin. "Preoperative metabolic classification of thyroid nodules using mass spectrometry imaging of fine-needle aspiration biopsies." *Proceedings of the National Academy of Sciences* Oct 2019, **116** (43) 21401–21408.
- Carvalho, Carlos, Avi Feller, Jared Murray, **Spencer Woody**, and David Yeager. "Assessing Treatment Effect Variation in Observational Studies: Results from a Data Challenge." *Observational Studies*, **5** 21–35 (2019).

TALKS & PRESENTATIONS

- "Interpreting treatment effect heterogeneity through posterior summarization." Contributed talk. Joint Statistical Meetings, Philadelphia, Pennsylvania. Aug 2020.
- "Model Interpretation through Posterior Summarization." SDS Seminar Series, University of Texas at Austin. Oct 2019.
- "Posterior Summarization for the Causal Linear Model." Poster presentation. Atlantic Causal Inference Conference, McGill University, Montreal, Canada. May 2019.
- "Bayesian model calibration using preposterior generalized cross-validation." Invited talk. Uncertainty Quantification Mini Workshop, University of Texas at Austin. Sep 2018.
- "Bayes-optimal post-selection inference in spatial modeling." Contributed talk. World Meeting of the International Society of Bayesian Analysis, University of Edinburgh, United Kingdom. Jun 2018.

EMPLOYMENT

Research Assistant for Professor Carlos Carvalho

Department of Information, Risk, and Operations Management
University of Texas at Austin McCombs School of Business

Aug 2018 – present
Business

Research Intern for Sandia National Laboratories Aug 2017 – Jun 2018 Albuquerque, NM

Supervisor: Dr. Lauren Hund

Research Assistant for Eberlin Research Group

Department of Chemistry

University of Texas at Austin

Research Assistant for Professor Mike Daniels

Department of Statistics and Data Sciences

University of Texas at Austin

Jan 2017 – May 2017

HONORS & AWARDS

• University Graduate Continuing Fellowship (2020 – 2021) The University of Texas at Austin

PROFESSIONAL MEMBERSHIPS

- American Statistical Association, since 2016
- International Society for Bayesian Analysis, since 2017

PROFESSIONAL SERVICE

Reviewer for:

• Journal of Computational and Graphical Statistics, Annals of Applied Statistics, Biostatistics

SOFTWARE

R package saFAB for Bayes-optimal selection-adjusted confidence sets. Companion R package to the paper by Woody & Scott (2018), "Optimal post-selection inference for sparse signals: a nonparametric empirical-Bayes approach." *arXiv:1810.11042*. Available at github.com/spencerwoody/saFAB

last updated: June 9, 2020