Contact Information

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Education

Ph.D., Statistics, Stanford University, 2017
Ph.D. Minor, Computer Science
Dissertation Title: Evaluating Diagnostics Under Dependency Constraints
Advisers: Lu Tian, Ingram Olkin
B.S., Mathematics, Stanford University, 2004

Employment

Assistant Professor
Department of Mathematics & Statistics
University of Massachusetts at Amherst, Sept. 2019–present
Post-doctoral Research Associate
Department of Statistics, The Wharton School, Aug. 2018–Sept. 2019
Department of Biostatistics, Harvard School of Public Health, Aug. 2017–Aug.2018

Invited Talks

The Personalized and Population AUCs. UConn Statistics Seminar, Storrs, CT, Oct. 2022.

Inference on the AUC for Clustered Data. UMass, Amherst Applied Math Seminar, Amherst, MA, Oct. 2021.

Estimating MSM Parameters Using Instrumental Variables: Necessary Conditions and an Application. UMass, Amherst Biostatistics Seminar, Amherst, MA, Nov. 2019.

Instrumental Variable Estimation of a Cox Marginal Structural Model with Endogenous Time-Varying Exposure. Recent advances in causal inference for survival analysis, ENAR Philadelphia, PA, March 2019.

Weighted K-Means Clustering with Dynamic Programming Solution. Meta-Research Innovation Center at Stanford Forum, Stanford, CA, Apr. 2016

Referee Experience

The American Statistician, Journal of the Royal Statistical Society Series B and C, Biometrics, Statistics in Medicine, Statistical Methods in Medical Research

References

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Publications

[1] Haben Michael, Yifan Cui, Scott Lorch, and Eric J. Tchetgen Tchetgen. Identification and estimation of linear marginal structural models for time-varying endogenous treatments: A time-varying instrumental variable approach, 2022. Under revision at the Journal of American Statistical Assn., Theory & Methods Section.

[2] Haben Michael and Musie Ghebremichael. Corrected inference with Begg's test for publication bias. Under review at Biometrical Journal, 2022.

[3] Yifan Cui, Haben Michael, and Eric J. Tchetgen Tchetgen. Instrumental variable estimation of the marginal structural Cox model for time-varying treatments. *Biometrika*, page asab062, 2021.

[4] Haben Michael and Musie Ghebremichael. Power analysis of common tests for publication bias. In progress, 2022.

[5] Musie Ghebremichael and Haben Michael. Comparison of the binormal and Lehman receiver operating characteristic curves. To appear in Communications in Statistics, Simulation & Computation, 2022.

[6] Haben Michael and Lu Tian. The individual and population AUCs for clustered data. In progress, 2022.

[7] Haben Michael. Analysis of the jackknife for inference on the AUC for clustered data. In progress, 2022.

[8] Joseph Makhema et al. Universal testing, expanded treatment, and incidence of HIV infection in Botswana. *New England Journal of Medicine*, 381(3):230–242, 2019.

[9] Haben Michael, Yifan Cui, and Eric J. Tchetgen Tchetgen. Efficient and robust estimation of marginal structural models for time-varying endogenous treatments. In progress, 2022.

[10] Haben Michael and Eric J. Tchetgen Tchetgen. Principled covariate adjustment for treatment comparisons in RCTs without blinding. In progress, 2022.

[11] Eric J. Tchetgen Tchetgen, Haben Michael, and Yifan Cui. Marginal structural models for time-varying endogenous treatments: A time-varying instrumental variable approach. Technical report, Department of Statistics, The Wharton School, September 2018. arXiv:1809.05422.

[12] Haben Michael, Suzanne Thornton, Minge Xie, and Lu Tian. Exact inference on the random-effects model for meta-analyses with few studies. *Biometrics*, 75(2):485–493, 2019.

[13] Haben Michael, Lu Tian, and Musie Ghebremichael. The ROC curve for regularly measured longitudinal biomarkers. *Biostatistics*, 20(3):433–451, 2019.

[14] Haben Michael and Lu Tian. Discussion of "A risk-based measure of time-varying prognostic discrimination for survival models," by C. Jason Liang and Patrick J. Heagerty". *Biometrics*, 73(3), 2017.

[15] Abraar Karan, Prashanth Somasundaram, Haben Michael, Aryan Shayegani, and Hylton Mayer. The effect of multimedia interventions on the informed consent process for cataract surgery in rural south india. *Indian Journal of Ophthalmology*, 62(2):171, 2014.