Anja Shahu

240-743-8930 | anja.shahu@gmail.com | github | website

Education

Columbia University — New York, NY
PhD in Biostatistics | GPA: 3.95/4.00 — *Sep 2022 – May 2026 (Expected)*

Harvard University — Boston, MA
MS in Biostatistics | GPA: 3.98/4.00 — *Aug 2020 – May 2022*

Johns Hopkins University — Baltimore, MD
BA in Public Health Studies | GPA: 3.92/4.00 — *Aug 2016 – Dec 2019*

Relevant Coursework: Statistical Inference I & II, Statistical Methods, Probability, Statistical Computing, Asymptotics, Causal Inference, Graphical Models, Statistical Learning, Regression Analysis, Longitudinal Analysis, Survival Analysis, Bayesian Analysis, Data Science, Deep Learning, Clinical Trials, Data Structures & Algorithms.

Experience

Research Assistant — June 2024 – Present
Columbia University, Department of Biostatistics, Advisor: Daniel Malinsky — *New York, NY*

- Developed methods based on longitudinal modified treatment policies (LMTPs) for causal inference of rates of change under complex missingness to investigate the effect of air pollution policies on change in lung health over time in MESA Air.

Instructor — June 2024 – July 2024
Columbia University, Department of Biostatistics — *New York, NY*

- Developed and taught "Introduction to Biostatistics" for the Biostatistics Epidemiology Summer Training Program.

Teaching Assistant — Sep 2022 – Present
Columbia University, Department of Biostatistics — *New York, NY*

- Held office hours and graded for "Causal Inference", "Longitudinal Analysis", "Data Science", and "Statistical Inference".

Research Assistant — Feb. 2021 – May 2022
Brigham and Women's Hospital, PI: Tamar Sofer — *Boston, MA*

- Incorporated the sampling design from a complex health survey into matching-based causal inference methods to investigate the effect of insomnia on hypertension and mild cognitive impairment in the US Hispanic/Latino population.

Teaching Assistant — Feb 2021 – May 2022
Harvard University, Department of Biostatistics — *Boston, MA*

- Led lab sessions, held office hours, and graded for "Linear & Longitudinal Analysis", "Principles of Biostatistics & Epidemiology", and "Statistical Learning", and monitored discussion forums for "Data Science Professional Certificate".

Publications

Published

1. **Shahu, A.**, Chung, J., Tarraf, W., Ramos, A. R., González, H. M., ... & Sofer, T. (2023). Method comparison and estimation of causal effects of insomnia on health outcomes in a survey sampled population. Scientific reports, 13(1), 9831.

In Progress/Under Review

1. Hilden P., **Shahu, A.**, Gibson E.A., Wright J., Kioumourtzoglou M.A., Goldsmith J. Robust Decomposition of Accelerometer Data through Functional Principal Component Pursuit. Under review.
2. **Shahu, A.**, Malinsky, D. Causal Inference of Rates of Change Based on LTMPs. In preparation.
3. **Shahu, A.**, Navas-Acien A., Suchy-Dicey A., Buchwald D., Goldsmith J., Domingo Relloso A., Valeri L. Association of Metal Mixtures with Cognitive Function in the Strong Heart Study. In preparation.

Honors/Awards

T32 in Mental Health Biostatistics and Data Science (MH-BDS), July 2024 - Present
Harvard Presidential Scholar, Aug. 2020 – May 2022
Hopkins Academic Success Award, Aug. 2016 – Dec. 2019
Dean's List, Aug. 2016 – Dec. 2019

Skills

Programming: R, Python, SAS, Stata.
Tools: LaTeX, Git/Github, Shiny, Cluster Computing.
Abilities: Causal inference, machine learning, statistical modeling, data wrangling, data visualization.