# Anja Shahu

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#### EDUCATION

Columbia University

New York, NY

PhD in Biostatistics | GPA: 3.95/4.00

Sep 2022 - May 2027 (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, Google Cloud Platform, Cluster Computing.

Abilities: Causal inference, machine learning, statistical modeling, data wrangling, data visualization.