Suhwan Bong

Last Updated on March 31, 2025

677 Huntington Ave Boston, MA 02115 ⊠ suhwanbong@g.harvard.edu Suhwanbong121.github.io in suhwanbong

Research Interests

Causal inference, Non-/Semi-parametric inference, Machine learning, Observational Studies

Education

- 2024- Ph.D. in Biostatistics, Harvard T.H. Chan School of Public Health, Boston, MA
- 2022–2024 **M.S. in Statistics**, *Seoul National University*, Seoul, South Korea Advisor: Kwonsang Lee Thesis: *Causal Inference with Exposure Misclassification in Observational Studies*
- 2016–2022 B.S. in Statistics & Mathematics, Seoul National University, Seoul, South Korea Summa Cum Laude

Publications

- [1] **S. Bong** and K. Lee. Local causal effects with continuous exposures: A matching estimator for the average causal derivative effect. *arXiv*, preprint, 2024. [link].
- [2] S. Bong, K. Lee, and F. Dominici. Differential recall bias in estimating treatment effects in observational studies. *Biometrics*, 80(2), 2024. [link].

Research Experience

- 2022–2024 **Graduate Research Assistant**, *Seoul National University*, Seoul, South Korea Causal Inference Laboratory (PI: Kwonsang Lee)
 - Developed causal inference methodologies and established their mathematical foundations.
 Focused on measurement error and continuous exposures in observational studies.
- 2021–2022 Undergraduate Research Assistant, Seoul National University, Seoul, South Korea Spatial Statistics Laboratory (PI: Chae Young Lim)
 Methodological and application-driven projects dealt with spatial and spatio-temporal data.
 - \odot Aimed to develop a statistical model explaining the transmission of COVID-19 in Korea.
 - 2021 **Undergraduate Research Assistant**, *Seoul National University*, Seoul, South Korea Nonparametric Inference Laboratory (PI: Byeong U. Park)
 - O Statistical methodologies on infinite-dimensional parametric spaces and asymptotic theory.
 - Focused on studying additive regression with Hilbertian responses and its properties.

Joint Research Project

- 2023 **Joint Researcher**, *Samsung Medical Center*, Seoul, South Korea • Examined the clinical data of Chronic Obstructive Pulmonary Disease (COPD) patients.
- 2022-2023 Joint Researcher, Seoul National University Hospital, Seoul, South Korea
 Designed the study and analyzed the data of epilepsy patients during the COVID-19 pandemic.

Teaching Experience

Teaching Assistant

- Spring 2024 Causal Inference, Seoul National University, Department of Statistics
- Fall 2023 Data Analysis and Lab., Seoul National University, Department of Statistics
- Spring 2023 Mathematical Statistics 1, Seoul National University, Department of Statistics
- Fall 2022 Data Analysis and Lab. 1, Seoul National University, Department of Statistics
- Spring 2022 Nonparametric Statistics and Lab., Seoul National University, Department of Statistics

Presentations

Conference and Seminar Talks

 S. Bong, K. Lee, and F. Dominici. Differential recall bias in estimating treatment effects in obsevational studies. 6th International Conference on Econometrics and Statistics, Tokyo, Japan, Aug. 2023.

Posters

- [1] **S. Bong** and K Lee. Local causal effects with continuous exposures. *Korean Statistical Society Conference*, Busan, South Korea, Dec. 2023.
- [2] S. Bong, K. Lee, and F. Dominici. Differential recall bias in estimating treatment effects in obsevational studies. *Korean Statistical Society Conference*, Jeju, South Korea, Dec. 2022.

Awards & Honors

- 2024–2029 KFAS Overseas PhD Scholarship, Korea Foundation for Advanced Studies
- Dec. 2022 Outstanding Poster Presentation Award, Korean Statistical Society Conference
- Dec. 2022 Best Teaching Assistant Award, Seoul National University, Department of Statistics
- 2016–2022 Korea Presidential Science Scholarship, Korea Student Aid Foundation
- 2016–2022 Dean's List, Seoul National University
- 2014–2015 Hanseong Gifted Scholarship, Hanseong Sonjaehan Scholarship Foundation

Skills

- Programming Python, R, SQL, C/C++, LATEX
- Language Korean (Native), English (Fluent)