

YI-TING LIN

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EDUCATION

University of Michigan
PhD Student in Biostatistics

Ann Arbor, MI
Sept. 2023 - Present

Johns Hopkins University
Master of Science in Biostatistics

Baltimore City, MD
Sept. 2021 - Jun. 2023

National Taipei University
Bachelor of Arts in Economics
Bachelor of Business Administration in Statistics

New Taipei, Taiwan
Sept. 2015 - Jun. 2020

RESEARCH EXPERIENCE

University of Michigan, Prof. Bhramar Mukherjee
Graduate Student Research Assistance

Ann Arbor, MI
Sept. 2023 - Present

Greater burden of extreme weather events on female mortality: A call to arms for global data equity

- Investigated the gender-specific heat and cold exposure-related mortality differences in India with GLM and GEE.

Tutorial on Conducting Causal Mediation Analysis in the Presence of Exposure Mixture

- Review and implement several methods designed to tackle the high dimensionality and correlation issues in exposure data in combination with causal mediation analysis.
- Demonstrate the applications of the discussed methods on a simulated dataset and a real-life data example with accompanying R code.

Association of Prenatal Phthalate Exposures and Newborn DNA Methylation in PROTECT Study

- Collaboration project with Dr. John Meeker and Dr. Deborah Watkin's lab of University of Michigan Department of Environmental Health Sciences
- Constructed linear models to assess phthalate exposure associations with single CpG site differential DNA methylation and array-wide mean DNA methylation differences.
- Tested enrichment for gene ontology biological process pathways with the single CpG site results.

Johns Hopkins University, Prof. Abhirup Datta
Graduate Student

Baltimore City, MD
Jun. 2022 - Sept. 2023

Non-transportable Statistical Calibration of Low-cost NO₂ Sensor Data in Baltimore

- Determine regression-based formula and pollutant constraint rules that subsets the best representative sample to create a universal calibration model for low-cost NO₂ sensors of 46 locations.
- Visualize sensor measurement variance variability and hourly variance of same-day pollutant difference to determine universal well-mixed time windows.
- Evaluate model performance of utilizing alternative locations' data as proxy-reference for training and prediction.

National Taipei University, Prof. Yi-Ting Hwang
Team Research Project

New Taipei, Taiwan
Mar. 2020 - Jun. 2020

Investigation of Legal Aid Cases' Distribution and Significant Factors in the Taipei Metropolitan Area

- Applying areal statistics with Bayesian modeling to mark outlier regions and clustering patterns.
- Prioritize areas based on prediction results that are in urgent need for legal resource reallocation.
- Identifying key areas through scrutinizing significant factors.

National Taipei University, Prof. Shou-Yung Yin
Research Assistant

New Taipei, Taiwan
Mar. 2020 - Aug. 2020

Evaluation of Multiple-testing Variable Selection with Double LASSO Design in High-dimensional Settings

- Combining LASSO regression and multiple testing on high-dimensional variable selection.
- Explore various methods to optimize multiple testing and LASSO variable selection performance.
- Wrote simulation code (mostly R code) to apply on different economic scenarios.

TEACHING ASSISTANT EXPERIENCE

Johns Hopkins University, Prof. Margaret Taub and Prof. Leah Jager
Teaching Assistant (Public Health Biostatistics)

Baltimore City, MD
Aug. 2022 - Dec. 2022

- Lead 2 lab sessions of 25 students to review and instruct on course materials.
- Office hours with individual students to answer and review assignments, projects, quizzes.

National Taipei University, Prof. Hsiao-Chi Chen
Teaching Assistant (Mathematics for Economics)

New Taipei, Taiwan
Sept. 2018 - Jun. 2019

- Lead lab sessions of 40 students to explain assignments and demonstrate simulations on course concepts.
- Built interactive Apps(with R shiny) and static web pages for weekly discussions.

PROFESSIONAL SKILLS AND OTHER ACTIVITIES

Language	Mandarin (Native), English (Fluent)
Software	R, SAS, Python, LaTeX, PostgreSQL, Docker