XINWEI HUANG

xinweihuangstat@gmail.com

EDUCATION

Ph.D. candidate in Biostatistics   **Aug 2021 - present**
State University of New York at Buffalo
Advisor: Dr. Saptarshi Chakraborty

Ph.D. student in Statistics   **Sep 2019 - Jul 2021**
National Chiao Tung University
Advisor: Dr. Weijing Wang

M.S in Statistics   **Sep 2017 - Jun 2019**
National Central University
Advisor: Dr. Takeshi Emura

B.B.A in Statistics and Information Science   **Sep 2013 - Jun 2017**
Fu Jen Catholic University
Advisor: Dr. Juei-Chao Chen

EXPERIENCES

Research Assistant   **Aug 2023 - present**
Roswell Park Comprehensive Cancer Center

Intern Biostatistician   **May 2024 - Aug 2024**
Merck

Teaching Assistant   **Aug 2021 - May 2023**
University at Buffalo

Intern Statistician   **Jul 2020 - Sep 2020**
Xiamen Chazen Biomedical Technology Company

PUBLICATIONS (* : Corresponding author)

Articles

- Statistical Methodology

[4]   Liang, S., Fang, K. T., **Huang, X.-W.**, Xin, Y., & Ma, C. X. (2024). Homogeneity tests and interval estimations of risk differences for stratified bilateral and unilateral correlated data. *Statistical Papers*, 1-45.

[3]   **Huang, X. W.,** & Emura, T. (2024). Computational methods for a copula-based Markov chain model with a binomial time series. *Communications in Statistics-Simulation and Computation*, 53(4), 1973-1990.

[2] **Huang, X.-W.**, Wang, W., & Emura, T. (2021). A copula-based Markov chain model for serially dependent event times with a dependent terminal event. *Japanese Journal of Statistics and Data Science*, *4*(2), 917–951. doi:10.1007/s42081-020-00087-8

[1] **Huang, X.-W.**, & Emura, T. (2021). Model Diagnostic Procedures for copula-based Markov chain models for Statistical Process Control. *Communications in Statistics - Simulation and Computation*, *50*(8), 2345–2367. doi:10.1080/03610918.2019.1602647

- Collaborative Applied Research

[2] Chua Jr, A. V., Delmerico, J., Sheng, H., Huang, X. W., Liang, E., Yan, L., ... & Yao, S. (2024). Under-Representation and Under-Reporting of Minoritized Racial and Ethnic Groups in Clinical Trials on Immune Checkpoint Inhibitors. *JCO Oncology Practice*, OP-24.

[1] Liang, E., Beshara, M., Sheng, H., Huang, X. W., Roh, J. M., Laurent, C. A., ... & Yao, S. (2024). A prospective study of vitamin D, proinflammatory cytokines, and risk of fragility fractures in women on aromatase inhibitors for breast cancer. *Breast Cancer Research and Treatment*, 1-10.

- Submitted/ In-preparation

[3] Liang, S., ***Huang, X.-W.** (2024+) Testing the Homogeneity of Two Proportions for Correlated Bilateral Data via Copulas.

[2] **Huang, X.-W.**, Chakraborty, S. (2024+) A Bayesian framework for medical product safety assessment using correlated spontaneous reporting system data.

[1] **Huang, X.-W.**, Hua, J., Banerjee, B, Wang, X., Li, Q. (2024+) An advanced design of weighted Hochberg procedure with correlated endpoints.

Books

[1] Sun, L.-H., **Huang, X.-W.**, Alqawba, M. S., Kim, J.-M., & Emura, T. (2020). *Copula-based Markov models for time series: Parametric inference and Process Control*. Singapore: Springer.

STATISTICAL SOFTWARE DEVELOPMENT

corrMCT: An R package focusing on multiplicity control for weighted and correlated endpoints.

pvBayes: An R package implementing signal detection method for pharmacovigilance using Bayesian sampling, estimation, and inference.

Copula.Markov.survival: An R package for likelihood estimation and corresponding analysis under the copula-based Markov chain model for serially dependent event times with a dependent terminal event

Copula.Markov: An R package for performing estimation and statistical process control under copula-based time-series models.

PRESENTATIONS

[10] (contributed) An advanced design of weighted Hochberg procedure with correlated endpoints, Merck BARDS seminar, Edison, Aug 2024

[9] (contributed) A Bayesian framework for medical product safety assessment using correlated spontaneous reporting system data, UP-STAT 2024 Conference, Rochester, Apr 2024

[8] (contributed) A Bayesian framework for medical product safety assessment using correlated spontaneous reporting system data, ENAR 2024, Baltimore, Mar 2024

[7] (poster) Model diagnostic procedures for copula-based Markov chain models for statistical process control, Perry Poster, Buffalo, Apr 2023

[6] (contributed) Likelihood-based inference for copula-based Markov chain model and its applications, UP-STAT 2022 Hybrid Conference, Buffalo, May 2022

[5] (invited) A copula-based Markov chain model for serially dependent event times with a dependent terminal event, 2019 CSA Statistical Meetings, Hsinchu, Dec 2019

[4] (contributed) The np-control chart using copula-based Markov chain models (contributed), The 3rd International Conference on Econometrics and Statistics, Taichung, Jun 2019

[3] (contributed) Model diagnostic procedures for copula-based Markov chain models for statistical process control, The 28th South Taiwan Statistics Conference, Taichung, Jun 2019

[2] (poster) Model diagnostic procedures for copula-based Markov chain models for statistical process control, The 2nd Statistical Research Seminar for Graduate Students, Hsinchu, Jun 2019

[1] (contributed) Review on joint frailty copula models for recurrent event times2018 CSA & NCU Joint Statistical Meetings, Chungli, Nov 2018

SERVICES

Peer Reviewer of Scholarly Journals
- Computational Statistics and Data Analysis (1)
- Japanese Journal of Statistics and Data Science (1)
- Econometrics and Statistics (1)

President of UBuffalo ASA Student Chapter   2023 – present

Member of UB SPHHP Graduate Academic Action Committee   2023 - 2024

Founder of UBuffalo ASA Student Chapter   2023

Vice President of UB Biostatistics GSA   2022 – 2023

TEACHING

STA 527 Statistical Analysis I (Teaching assistant at UB)   2022 Spring

STA 527 Statistical Analysis I (Teaching assistant at UB)   2022 Fall

STA 528 Statistical Analysis II (Teaching assistant at UB)   2022 Spring

AWARDS AND HONORS

Dr. Richard N. Schmidt Scholarship	2021, 2022
The Best Thesis of the Chinese Statistical Association (Taiwan)	2019
University Scholarship (NCU)	2017, 2018
The First Prize of Research Project Contest (FJU)	2016
University Scholarship (FJU)	2016

PROFESSIONAL MEMBERSHIP

American Statistical Association (ASA)	2023 - Present
IBS Eastern North American Region (ENAR)	2023 – Present
Chinese Statistical Association (Taiwan) (CSAT)	2017 - 2020