JIAWEI HUANG

+1(608)236-3665 ⋄ huang2jw@mail.uc.edu ⋄ Personal Website ⋄ Google Scholar
Carl H. Lindner College of Business, University of Cincinnati
2906 Woodside Drive, Cincinnati, OH, 45221

EDUCATION

Carl H. Lindner College of Business, University of Cincinnati (Cincinnati, USA) 2021 – 2026 (Expected)
Doctor of Philosophy (Ph.D.) in Business Analytics

Department of Statistics, University of Wisconsin-Madison (Madison, USA) 2019 – 2021
Master of Science (M.Sc.) in Data Science and Statistics

Department of Statistics, Renmin University of China (Beijing, China) 2016 – 2020
Bachelor of Science (B.Sc.) in Statistics

RESEARCH

My research centers on the development and application of statistical methodology for complex business data. I create tools for **discrete data analysis** and the integration of **large language models** to analyze mixed-type and unstructured survey data. In parallel, I advance statistical learning methods—including **penalized regression**, **neural networks**, and **deep learning**—for high-dimensional, multi-modal data, with applications in asset pricing, econometrics, and organizational research.

Dissertation Papers

1. An "*i*-mobility" Framework for Studying Social Mobility: Individualized Inference via Generative Analysis of Discrete Data (With Dungang Liu, Yuan Jiang, and Yu Xie). Preparing for submission to *Journal of the American Statistical Association*.
2. Simplicity versus Complexity: The Role of Historical Average in Kelly, Malamud, and Zhou's (2024) RFF Model. (with Hui Guo and Yan Yu). Preparing for submission to *Journal of Finance*.

Peer-Reviewed Publications

3. **Huang, J.**, Sheng, J., & Wang, D. (2021). Manifold Learning Analysis Reveals Strategies for Aligning Single-Cell Multi-modal Data of Neuronal Electrophysiology and Transcriptomics. *Communications Biology*, 4(1), 1308.
4. Nguyen, N. D., **Huang, J.**, & Wang, D. (2022). A Deep Manifold-Regularized Learning Model for Enhancing Phenotype Prediction from Multi-modal Data. *Nature Computational Science*, 2(1), 38-46.
5. Jin, T., Rehani, P., Ying, M., **Huang, J.**, Liu, S., Roussos, P., & Wang, D. (2021). scGRNom: A Computational Pipeline for Integrative Multi-Omics Analysis to Predict Cell-Type-Specific Disease Genes and Regulatory Networks. *Genome Medicine*, 13(1), 95.

Other Working Papers

6. **Huang, J.**, Zheng, H., Dust, S., & Fry, M. J., I Will Pay You Back in The Future: Examining Employees' On-Job Perceptions of Organizations and Their Intention of Making Post-Turnover Employment Referrals. Preprint for *International Journal of Human Resource Management*. .
7. Leveraging LLMs and Generative AI for Supervised Survey Text Extraction: Evidence from Engagement Surveys and Exit Interviews (With Michael J. Fry and Kanix Wang). Finalizing statistical analysis results, targeting *INFORMS Journal on Applied Analytics*.
8. Statistical Improvements in Counterfactual Analysis for fsQCA (With Yanran Liu and Peng Wang). Finished theory formalization and data collection, running statistical analysis. Targeting *Information System Research*.

Industry Collaborations through Center of Business Analytics

- **Ryerson Inc.** — Developed inventory forecasting models adopted for multi-location operations.
- **HSD Metrics** — Linked engagement and exit survey data to analyze turnover intentions.
- **Drees Home** — Built housing price prediction dashboards in Power BI.
- **ABC Fitness** — Designed analytics pipeline for payment fraud detection.

TEACHING AND STUDENT ADVISORY

Teaching Interests

I am passionate about integrating statistical methods, programming, and machine learning/AI tools into business education, preparing students to make data-driven decisions in real-world contexts. I am well-prepared to teach courses such as **Business Analytics, Statistical Computing, Probability Models, Optimization, Machine Learning, Data Mining, and Artificial Intelligence**, while remaining open and enthusiastic about contributing to other courses where my expertise can add value.

Independent Instructor (In-person and Online)

- Probability Models (Graduate. Incoming) — Fall 2025
- Statistical Computing (Graduate. Eval: 7.3/8.0) — Summer 2025
- Descriptive Analytics and Data Visualization (Undergraduate. Eval: 7.5/8.0) — Spring 2024
- Descriptive Analytics and Data Visualization (Undergraduate. Eval: 7.0/8.0) — Summer 2022

Teaching Assistant

Data Mining (Spring 2023), Descriptive Analytics and Data Visualization (Spring 2022), Forecasting Methods (Spring 2022), Applied Linear Regression (Fall 2022), Applied Statistical Methods (Fall 2022), and Probability Models (Fall 2021)

Student Mentoring

*I served as an advisor at the Center for Business Analytics on two projects with **Drees Homes** and **ABC Fitness**, guiding four students including Dung Nguyen (BA undergraduate), Soumya Vemparala (CS master's), Sonal Shah (CS master's), and Caroline Adams (BA undergraduate).*

Second Reader for Capstone Essays

I served as the second reader for two capstone projects in the Master of Science in Business Analytics program, focusing on recession prediction and audio genre classification.

PRESENTATIONS

- **Invited Session**, *An "i-Mobility" Framework for Studying Social Mobility: Profile-Based Generative Conditional Inference*, Joint Statistical Meeting (JSM), Nashville, TN. 08/2025
- **Invited Discussant**, *Discussion: Predicting Power Grid Failures using Self-Organized Criticality: A Case Study of the Texas Grid 2014-2022*, International Risk Conference (MRS) , Boston, MA. 07/2025
- **Refereed Paper with Award**, *Revisiting the 'Virtue of Complexity' in Ridgeless Regression*, Symposium on Data Science and Statistics (SDSS), Salt Lake City, UT. 05/2025
- **Student Paper Competition with Award**, *An "i-Mobility" framework for studying social mobility: individualized inference via generative analysis of discrete data*, KY-ASA meeting, Lexington, Kentucky. 04/2025
- **Invited Session**, *Gender Moderating Effects in registered nurses (RNs)' Turnover: A Focus on Alumni Post-Turnover Recommendations*, Annual POMS-Conference, Orlando, FL. 04/2024

- **Contributed Session**, *Personalized Inference for Social Mobility: Acknowledging Heteroscedasticity and Differentiating Subpopulations*, Joint Statistical Meeting (JSM), Toronto, CA. 08/2023
- **Refereed Paper with Award**, *Inference for Conditional Association: Acknowledging Heteroscedasticity and Subpopulations*, Symposium on Data Science and Statistics (SDSS), St. Louis, MO. 05/2023
- **Contributed Poster and Lightning Talk**, *Manifold learning applications in single-cell multi-modal data*, Symposium on Data Science and Statistics (SDSS), Pittsburgh, PA. 06/2022

AWARDS AND FELLOWSHIPS

- **Research Fellowship**, Center of Business Analytics Research Fellowship ($7800) 2022 – 2023
- **Conference Award**, Best Student Paper Award, KY-ASA meeting 2025
- **Conference Award**, Student and Early-Career Awards, SDSS 2025
- **Conference Award**, Student and Early-Career Travel Awards, SDSS 2023
- **University Level Award**, Graduate Student Government (GSG) Research Fellowship ($1700) 2023
- **University Level Award**, Graduate Student Government (GSG) Student Travel Award 2021 – 2025
- **University Level Award**, Siddall Fund 2019

SERVICE

Academic Service

- Invited Journal Reviewer
  - *Journal of American Statistical Association* 2025
  - *Statistical Papers* 2023
- Conference Session Chair
  - Joint Statistical Meeting (Time Series Signals and Prediction) 2025
  - Symposium on Data Science & Statistics (Modeling Innovations) 2025
  - Symposium on Data Science & Statistics (Predictive Modeling in Nature) 2024

Service to the University of Cincinnati

- Graduate Student Governance (GSG) Excellence Awards Committee 2025
- President - American Statistical Association (ASA) UC Chapter 2025 - present
- President - Institute for Operations Research and the Management Sciences (INFORMS) UC Chapter 2024 – present
- Treasurer - Lindner Graduate Student Association (LGSA) 2024 - present

Professional Membership

- American Statistical Association (ASA)
- International Chinese Statistical Association (ICSA)
- The Institute for Operations Research and the Management Sciences (INFORMS)
- Production & Operations Management Society (POMS)

SKILLS

Languages: Mandarin (native), English (professional)
Tools: Python, R, SAS, MATLAB, C/C++, LaTeX, Shell

Dr. Dungang Liu
Advisor, Chair
Professor of Business Analytics
Academic Director of UC Center for Business Analytics
Carl H. Lindner College of Business
Dept. of Operations, Business Analytics, and Information Systems
University of Cincinnati
Phone: +1(513)556-6357
Email: dungang.liu@uc.edu

Dr. Yan Yu
Advisor, Co-Chair
Joseph S. Stern Professor of Business Analytics
Fellow of the American Statistical Association
Carl H. Lindner College of Business
Dept. of Operations, Business Analytics, and Information Systems
University of Cincinnati
Phone: +1(513)556-7147
Email: yan.yu@uc.edu

Dr. Michael J. Fry
Committee Member
Professor of Operations
Senior Director of Lindner Centers & Institutes
Carl H. Lindner College of Business
Dept. of Operations, Business Analytics, and Information Systems
University of Cincinnati
Phone: +1(513)556-0404
Email: mike.fry@uc.edu