# **JIAWEI HUANG**

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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, OH, USA) 2021 – 2026 (Expected) Doctor of Philosophy (Ph.D.) in Business Analytics

Dissertation: Essays in Modern Survey Analysis and Machine Learning Applications in Business Analytics Committee: Dungang Liu (Cochair), Yan Yu (Cochair), Michael J. Fry, Hui Guo

Department of Statistics, University of Wisconsin-Madison (Madison, WI, 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

Methodology: Discrete Data Analysis, Nonparametric Statistics, Penalized Regression, Machine/Deep Learning, Large Language Models (LLMs), High-Dimensional and Multimodal Analysis, Qualitative Comparative Analysis

Application: Survey Analysis, Social Mobility, Financial Asset Pricing, Healthcare Operations, Information Systems, Gene–Environment Interaction

#### **Preprint or Submitted Papers**

- \* denote equal contributions; authors are ordered alphabetically by family name.
  - 1. **Jiawei Huang**, Dungang Liu, Yuan Jiang, & Yu Xie. An "*i*-mobility" Framework for Studying Social Mobility: Individualized Inference via Generative Analysis of Discrete Data. Preprint for submission to *Journal of the American Statistical Association*. **Job Market Paper**.
  - 2. Hui Guo\*, **Jiawei Huang**\*, & Yan Yu\*. Simplicity versus Complexity: The Role of Historical Average in Kelly, Malamud, and Zhou's (2024) RFF Model. Under review at *Journal of Finance*. [Link]
  - 3. **Jiawei Huang**\*, Huimiao Zheng\*, Scott Dust, & Michael J. Fry. 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 submission to *International Journal of Human Resource Management*.

# **Peer-Reviewed Publications**

- 4. **Jiawei Huang**, Jie Sheng, & Daifeng Wang. Manifold Learning Analysis Suggests Strategies to Align Single-Cell Multimodal Data of Neuronal Electrophysiology and Transcriptomics. *Communications Biology* 4.1 (2021): 1308. [Link]
- Nam D. Nguyen, Jiawei Huang, & Daifeng Wang. A Deep Manifold-Regularized Learning Model for Improving Phenotype Prediction from Multimodal Data. *Nature Computational Science* 2.1 (2022): 38–46.
   [Link]

6. Ting Jin, Peter Rehani, Mufang Ying, Jiawei Huang, Shuang Liu, Panagiotis Roussos, & Daifeng Wang. scGRNom: A Computational Pipeline for Integrative Multi-Omics Analysis to Predict Cell-Type-Specific Disease Genes and Regulatory Networks. *Genome Medicine* 13.1 (2021): 95. [Link]

## **Other Working Papers**

- 7. Leveraging Generative AI Models for Textual Analysis in Healthcare Human Resources Operations (With Michael J. Fry & Kanix Wang). Finished analysis, writing. Targeting INFORMS Journal on Data Science.
- 8. Finite-Sample Variable Prescreen Methods for Qualitative Comparative Analysis (With Yanran Liu, Peng Wang, & Zewei Lin). Finished analysis, writing. Targeting MIS Quarterly.

## **Industry Collaborations through Center of Business Analytics**

- Ryerson Inc. Developed inventory forecasting models for multi-location operations.
- HSD Metrics Analyzed turnover intentions by linking engagement and exit survey data.
- Drees Home Built housing price prediction dashboards in Power BI.
- ABC Fitness Designed an analytics pipeline for payment fraud detection.

#### TEACHING AND STUDENT MENTORING

- I am passionate about integrating statistical methods, programming, and machine learning/AI tools into business education. I am well-prepared to teach courses like Business Analytics, Data Wrangling, Applied Linear Regression, Probability Models, Optimization, Machine Learning and AI Algorithms, Data Mining, Database Management, while remaining enthusiastic about contributing to courses in other areas where my expertise can add value.

# **Independent Instructor (In-person and Online)**

#### **Graduate Courses**

BANA 7031 Probability Models (Incoming)	Fall 2025
• BANA 6043 Statistical Computing (Evaluation: 7.3/8.0)	Summer 2025

#### **Undergraduate Courses**

• BANA 4137 Descriptive Analytics and Data Visualization (Evaluation: 7.5/8.0)	Spring 2024
• BANA 4137 Descriptive Analytics and Data Visualization (Evaluation: 7.0/8.0)	Summer 2022

#### **Teaching Assistant**

#### **Graduate Courses**

• BANA 7047 Data Mining (Sections 001, 002, 003)	Spring 2023
• BANA 7051 Applied Statistical Methods (Sections 001, 002)	Fall 2022
• BANA 7052 Applied Linear Regression (Sections 001, 002)	Fall 2022
• BANA 7050 Forecasting Methods (Section 002)	Spring 2022
BANA 7038 Probability Models (Section 001)	Fall 2021

• BANA 4137 Descriptive Analytics and Data Visualization (Section 001)

Spring 2022

# **Student Mentoring**

I served as an advisor at the Center for Business Analytics on two projects with Drees Homes and ABC Fitness, guiding two Business Analytics undergraduate students and two Computer Science master's students.

# **Master's Capstone Essays**

I served as the second reader for multiple capstone projects in the Business Analytics master's program.

# **PRESENTATIONS**

PRESENTATIONS	
An "i-Mobility" Framework for Studying Social Mobility	
<ul> <li>2025 INFORMS Annual Meeting, Atlanta, GA</li> <li>Data Mining and Decision Analytics (DMDA) Workshop (Refereed Full Paper)</li> <li>Job Market Showcase Session</li> </ul>	10/2025
• Invited Session, Joint Statistical Meeting (JSM), Nashville, TN	08/2025
• Paper Competition with Award, KY-ASA Meeting, Lexington, KY	04/2025
• Contributed Session, Joint Statistical Meeting (JSM), Toronto, Canada	08/2023
• Contributed Poster, ISCA Applied Statistics Symposium, Ann Arbor, MI	06/2023
• Refereed Session with Award, Symposium on Data Science and Statistics (SDSS), St. Louis, MC	05/2023
• Contributed Session, Annual POMS Conference, Orlando, FL	04/2023
Simplicity versus Complexity: The Role of Historical Average in RFF Model	
• Refereed Session with Award, Symposium on Data Science and Statistics (SDSS), Salt Lake City,	UT 05/2025
Gender Moderating Effects in Registered Nurses' (RNs) Turnover	
• Invited Session, Annual POMS Conference, Minneapolis, MN	04/2024
Predicting Power Grid Failures using Self-Organized Criticality	
• Invited Discussant, International Risk Conference (MRS), Boston, MA	07/2025
Manifold Learning Applications in Single-Cell Multi-Modal Data	
• Contributed Poster, Symposium on Data Science and Statistics (SDSS), Pittsburgh, PA	06/2022
AWARDS AND FELLOWSHIPS	
• 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
<ul> <li>Conference Award, Student and Early-Career Travel Awards, SDSS</li> </ul>	2023

• Graduate Student Government (GSG) Research Fellowship (\$1700)	2023
• Graduate Student Government (GSG) Student Travel Award (\$4000)	2021 – 2025
• Siddall Fund (\$2000)	2021 – 2025
SERVICE	
Academic Service	
Ad Hoc Journal Reviewer	
- Journal of the American Statistical Association	
- Statistical Papers	
Conference Session Chair	
<ul> <li>Joint Statistical Meeting (Time Series Signals and Prediction)</li> </ul>	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

2024 - present

# **Professional Membership**

- American Statistical Association (ASA)
- International Chinese Statistical Association (ICSA)

• Treasurer – Lindner Graduate Student Association (LGSA)

- The Institute for Operations Research and the Management Sciences (INFORMS)
- Production & Operations Management Society (POMS)

# **SKILLS**

**Languages**: Mandarin (native), English (professional) **Programming**: Python, R, SAS, MATLAB, C/C++

Tools: LaTeX, Shell, Markdown

#### **REFERENCES**

# Dr. Dungang Liu

Advisor, Cochair

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, Cochair

Joseph S. Stern Professor of Business Analytics

Fellow of the American Statistical Association

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# Dr. Michael J. Fry

Mentor in UC Center for Business Analytics

**Professor of Operations** 

Senior Director of Lindner Centers & Institutes

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