Jiantong Wang

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Teaching Interest

Business Analytics Methods, Data Mining, Optimization, Statistical Methods, Data Visualization, Time Series Analysis, Database Management

- **Analytics Courses**: Business Analytics, Optimization Methods, Forecast Analysis, Simulation Modeling and Methods, Data Visualization, Database Management
- **Statistics Courses**: Statistical Methods, Data Mining, Statistical Modeling, Time Series Methods, Big Data Analytics, Statistical Computing
- **Programming/Software Courses**: R, Python, C++, Shell, SAS, Spreadsheet Analysis

Education

Ph.D. in Operations, Business Analytics, and Information Systems 2020 – 2025 (Expected)
Carl H. Lindner College of Business, University of Cincinnati (UC)

M.S. in Statistics 2020
School of Statistics, University of Wisconsin-Madison

B.S. in Applied Statistics (Actuarial Science & Risk Management Track) 2019
School of Statistics, Renmin University of China

Awards

- **Outstanding Doctoral Student Teaching Awards**, by Lindner College of Business, UC 2023
  - the highest teaching award for a Ph.D. student at the Lindner College of Business
- **Honorable Mention, Excellence in Teaching Award**, UC 2024
  - the only nominee from Lindner College of Business
- Graduate Student Government (GSG) Conference Travel Award, UC 2022
- Siddall Travel Fund, Lindner College of Business, UC 2022
- Honorable Mention, Interdisciplinary Contest In Modeling, Consortium for Mathematics and its Applications (COMAP) 2017

Research Interest

High Dimensional Data Analysis, Machine Learning, Healthcare Analytics, Optimization, Human Genetics, Corporate Bankruptcy, Multivariate Analysis, Network Analysis

Working Papers

1. **Wang J.**, Lian H., Yu Y., Zhang H."Quantile Regression with Insight Fusion for Ultra-high Dimensional Data with Application to Obesity," targeting *Journal of the American Statistical Association*. *ArXiv*

Research in Progress

2. **Wang J.**, Yu Y., "A Comprehensive Examination for Machine Learning Methods in Corporation Bankruptcy Prediction," targeting *Review of Accounting Studies*.
3. **Wang J.**, Zu T., Lian H., Yu Y., "Modeling Gene-Environment Interactions in Psychiatric Comorbidity: Generalized Multivariate Varying Coefficient Model," targeting *Journal of Multivariate Analysis*.

4. **Wang J.**, Zu T., Lian H., Yu Y., "Matrix-response Semiparametric Regression Model for Longitudinal Image Data," targeting *Bioinformatics*.
5. **Wang J.**, Yu Y., "Identifying Important G×E for High Quantiles of BMI in UK Biobank Data," (Lindner REC awarded project).
6. "Shrinkage Bootstrap: A Novel Bootstrap Method for Random Dot Product Graph (RDPG)," with Yichen Qin.
7. "PriorEN: A Novel Elastic Net Model Incorporating Prior Insights for Ultra-high Dimensional Data," with Yan Yu.

Presentations

1. "Identifying Genetic Variants for Obesity Incorporating Prior Insights: Quantile Regression with Insight Fusion for Ultra-high Dimensional Data"
   INFORMS Annual Meeting — Seattle, WA, 10/2024.
2. "A comprehensive examination for machine learning in corporate bankruptcy prediction"
   Joint Statistical Meetings (JSM) — Portland, OR, 8/2024.
3. "Identifying Genetic Variants for Obesity Incorporating Prior Insights: Quantile Regression with Insight Fusion for Ultra-high Dimensional Data"
   New England Statistics Symposium (NESS) — online, 5/2024.
4. "Penalized Quantile Regression Incorporating Prior Information for Ultra-high Dimensional Data"
   Joint Statistical Meetings (JSM) — Toronto, ON, 8/2023.
5. "Penalized Quantile Regression Incorporating Prior Information for Ultra-high Dimensional Data"
   Bayesian, Fiducial & Frequentist Conference (BFF) — Cincinnati, OH, 5/2023.
6. "Shrinkage Bootstrap: A Novel Bootstrap Method for Random Dot Product Graph (RDPG)"
   INFORMS Annual Meeting — Indianapolis, IN, 10/2022.

Funding Granted

- **Summer 2024 Lindner Research Grants**
  "Identifying Important Genetic Risk Factors for Obesity Incorporating Prior Insights: Quantile Regression with Insight Fusion for Ultra-High Dimensional Data", with Yan Yu
  (Granted **$3,000**)
- **Fall 2022 Lindner Research Grants**
  "Identifying GxE for BMI in UK Biobank Data", with Yan Yu
  (Granted **$690**)

Data Granted

- **UK Biobank**
  - Proposed for and gained access to the world's ***largest*** and ***most comprehensive*** genetic project and repository of health data, including more than 500,000 participants
  - Responsible for managing the datasets and annual renewal
- **NIH Framingham Heart Study**
  - Large datasets containing ***three generations*** of participants from 1948
  - Responsible for managing datasets and annual renewal for NIH

Teaching Experience

Independent Instructor:

- **Undergraduate Level**

  BANA 4090: Forecasting and Risk Analysis:
  Summer 2024(Eval: **7.8/8.0**)

  - Student evaluations comments:
    "One if not the best course that I acquired the most skills for my career."
    "Always was there to help all of us."

BANA 4090: Forecasting and Risk Analysis:
Summer 2023 (Eval: **7.8/8.0**)

- Student evaluations comments:
  "Great class. The professor was knowledgeable and helpful, and overall, it was a fun course. I enjoyed learning the topics."

BANA 4090: Forecasting and Risk Analysis Summer 2022 (Eval: **6.7/8.0**)

- **Graduate Level**

BANA 7046: Data Mining I Spring 2024 (Eval: **7.6/8.0**)

- Core course of M.S. Business Analytics program, class size: 70
- Student evaluations comments:
  "I am so glad Jiantong Wang was my instructor. They were very attentive to the class and truly cared about the student's success."
  "He knows what he is teaching. Clarifies doubts very clearly. Overall, an amazing professor."
  "I definitely feel that I have gained a lot of new information on data mining techniques and approaches to building machine learning models."
  "He cares about his students and clearly likes his work."

Recitation and Lab Instructor:

BANA 7042: Statistical Modeling Spring 2021

- Conducted R lab sessions to support students in learning statistical modeling techniques.
- Instructed application cases during lectures to demonstrate real-world use of statistical methods.

Teaching Assistant:

Spring 2021	BANA 4085 Spreadsheet Analytics
Spring 2021	BANA 7011 Data Analysis
Spring 2023/2024	BANA 7046 Data Mining I
Spring 2023/2024	BANA 7047 Data Mining II
Fall 2021	BANA 7051 Applied Statistical Methods
Summer 2021	BANA 7095 Graduate Case Studies in Business Analytics

Student Mentorship

- **Second Reader for Capstone Projects of M.S. Business Analytics Program**
  - I served as the second reader for ***35*** individual projects, covering a wide spectrum of topics. These included topics ranging from optimizing healthcare resources, credit card default risk prediction, motosports gaming prediction, to analyzing customer reviews, E-commercial marketing analysis, and predicting flight prices.

Service

- **President**, the Institute for Operation Research and the Management Sciences (INFORMS), UC Chapter
- **Volunteer**, 2023 BFF-8 Conference

Professional Membership

- President at UC Chapter, the Institute for Operation Research and the Management Sciences (INFORMS)
- Member, the American Statistical Association (ASA)
- Member, Institute of Mathematical Statistics (IMS)
- Member, Decision Sciences Institute (DSI)