ZEWEI LIN

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Carl H. Lindner College of Business, University of Cincinnati
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EDUCATION

Ph.D. in Business Administration (Business Analytics, GPA: 4.0/4.0),
Carl H. Lindner College of Business, University of Cincinnati — 04/2024 (Expected)

B.S. in Mathematical Statistics

B.A. in Philosophy

B.Ec. in Economic Statistics
Renmin University of China — 09/2015 - 06/2019

Summer Session Certificate in Biostatistics,
University of California, Berkeley — 07/2017 - 08/2017

AWARDS

- OBAIS Department Graduate Student Teaching Award Recipient — 02/2023
- Student and Early-Career Travel Awards, Symposium on Data Science and Statistics — 06/2022
- Student Poster Awards (Sponsored by Munich Re), New England Statistics Symposium — 05/2022
- *Mingde* Excellent Student Scholarship, Renmin University of China — 06/2017

RESEARCH

Research Interests:

Discrete data analysis and its applications in insurance premium and information system.

Published Papers:

- Liu, D., Zhu, X., Greenwell B., & **Lin, Z.** (2022), "A new goodness-of-fit measure for probit models: surrogate R^2", *British Journal of Mathematical and Statistical Psychology*, 76, 192-210. https://doi.org/10.1111/bmsp.12289

Major Working Papers:

- **Lin, Z.**, Liu, D., & Zhang, H. "Model diagnostics of discrete data regression: a unifying framework using functional residuals", submitted to the *Journal of the American Statistical Association*, https://arxiv.org/abs/2207.04299.
- **Lin, Z.**, Liu, D. & Li, J., "Tweedie modeling of insurance premium: breaking the box using diagnostics tools.", in preparation for *Management Science*.
- Zhu, X., **Lin, Z.**, Liu, D. & Greenwell B., "*Surr_rsq*: an R package for evaluating goodness of fit using surrogate R^2", manuscript for submission to the *R Journal*. [Package]
- **Lin, Z.**, Liu, D. & Samuel, B.,"Joint modeling of multivariate discrete outcomes? An exploratory framework and its application for the design of information system", in progress.

Research in Progress:

- "Bootstrap estimation for sparse edge-exchangeable network," with Yichen Qin.
- "Analyzing Conflicting Information via Multi-dimensional Textual Network Analysis Framework," with Tianhai Zu

Research during college study:

- An online algorithm to calculate high dimensional correlation matrix for analysis of brain image data (Summer 2018, with Prof. Moo K. Chung, University of Wisconsin-Madison).
  - It is adopted in *Brain Network Analysis, Cambridge University Press, Chung, M.K. (2019), Page 127.*

PRESENTATION

- **Contributed papers session**, "*Unfolding Tweedie model for insurance pricing: a diagnostic tool leading to actionable insights*", the Joint Statistical Meetings (JSM), Toronto, ON. 08/2023
- **Contributed poster**, "*A unified framework for residual diagnostics in generalized linear models and beyond*", ICSA Applied Statistics Symposium, Ann Arbor, MI. 06/2023
- **Invited session**, "*Surrogate R^2: a new goodness-of-fit measure and an R package for categorical data analysis*", New England Statistics Symposium (NESS), Boston, MA. 06/2023
- **Contributed poster**, "*Unfolding Tweedie model for insurance pricing: a diagnostic tool leading to actionable insights*", The Eighth Bayesian, Fiducial and Frequentist conference (BFF8), Cincinnati, OH. 05/2023
- **Contributed poster**, "*Model diagnostics of discrete data regression: a unifying framework using functional residuals*", the Joint Statistical Meetings (JSM), Washington D.C. 08/2022
- **Refereed session with travel award**, "*Model diagnostics of discrete data regression: a unifying framework using functional residuals*", Symposium on Data Science and Statistics (SDSS), Pittsburgh, PA. 06/2022
- **Student award presentation**, "*Model diagnostics of discrete data regression: a unifying framework using functional residuals*", New England Statistics Symposium (NESS), Mansfield, CT. 05/2022
- **Invited session**, "*Analyzing conflicting information via multi-dimensional textual network analysis framework*", INFORMS Annual Meeting, Virtual. 10/2020

TEACHING EXPERIENCE

Independent instructor (In-person & Online)

— *My courses have received high ratings,* ***surpassing the average departmental evaluation scores****, which typically range from* **6.56** *to* **7.31** *(Note: Evaluation score based on the grouped median of the overall excellence of the course on scale of 1(lowest) - 8(highest).)*

- **BANA 4085 Spreadsheet Analytics** (Undergraduate level, Eval: 8) Spring 2021
- **BANA 6043 Statistical Computing** (Graduate level, Eval: 7.8) Fall 2021
- **BANA 7046 Data Mining I** (Graduate level, Eval: 7.3) Spring 2022
- **BANA 7025 Data Wrangling** (Graduate level, Eval: 7.6) Fall 2022
- **BANA 7046 Data Mining I** (Graduate level, Eval: 7.8) Spring 2023

Teaching assistant

— *Undergraduate level courses*

- BANA 2081 Business Analytics I
- BANA 2082 Business Analytics II
- BANA 4085 Spreadsheet Analytics
- BANA 4137 Descriptive Analytics and Data Visualization
- BANA 4143 Data Management for Analytics

— *Graduate level courses*

- BANA 6043 Statistical Computing
- BANA 7052 Applied Linear Regression
- BANA 7046 Data Mining I
- BANA 7047 Data Mining II

Second Reader for Capstone Essays (10 Projects, M.S. in Business Analytics)

Teaching Interests

Business Analytics, Statistical Modeling, Big Data Technologies, Machine Learning, Data Analytic Methods, Data Mining, Data Wrangling, Text Mining.

PROFESSIONAL MEMBERSHIPS

- Member, American Statistical Association (ASA).
- Member, The Institute for Operations Research and the Management Sciences (INFORMS).
- Member, Institute for Mathematical Statistics (IMS).
- Member, New England Statistical Society (NESS).

SKILLS

Programming	R, Python, SPSS, SAS, C++, Matlab, Stata, and Eviews.
R Packages Developed	SurrogateRsq.
Languages	English (fluent); Chinese (native); Japanese (N3).