

Xiaorui (Jeremy) Zhu

[Google Scholar](#)

Homepage: <http://homepages.uc.edu/~zhuxr/>

zhuxr@mail.uc.edu

Education

Ph.D.	Business Analytics	University of Cincinnati	2016-2021
M.Sc.	Finance	The Pennsylvania State University	2014-2015
M.Sc.	Applied Statistics	Beijing University of Technology	2012-2014
B.S.	Statistics	Capital University of Economics and Business	2007-2011

Research

Research Interests:

- high dimensional statistical inference; machine learning; discrete data analysis;
- asset-pricing; default prediction in finance;
- creativity

Publications:

- Jablolkow, K. W., **Zhu, X.**, & Matson, J. V. (2020). [Exploring the diversity of creative prototyping in a global online learning environment](#). *International Journal of Design Creativity and Innovation*, 8(2), 102-124.
- **Zhu, X.**, & Xie, L. (2016). [Adaptive quasi-maximum likelihood estimation of GARCH models with Student's t likelihood](#). *Communication in Statistics: Theory and Methods*, 45(20), 6102-6111.
- Jablolkow, K. W., **Zhu, X.**, Matson, J. V., & Kakde, A. N. (2016, June). Stimulating creativity in online learning environments through intelligent fast failure. In *ASCE Annual Conference and Exposition, Conference Proceedings* (Vol. 2016).

Working Paper:

- **Zhu, X.**, Qin, Y., & Wang, P. (2020), Sparsified Simultaneous Confidence Intervals for High-Dimensional Linear Models (Under review).
- Liu, D., **Zhu, X.**, & Greenwell, B. (2020), A New Goodness-of-fit Measure for Probit Models: Surrogate R^2 (Under review).
- Li, S., **Zhu, X.**, Chen, Y., Liu, D. (2020) PAsso: an R Package for Assessing Partial Association between Ordinal Variables (Under review).
- Li, S., **Zhu, X.**, Yu, Y., Tian, S. (2020) Corporate Default Probability: A Discrete Single-Index Hazard Model Approach (Working paper).

Research In Progress:

- "Zooming in Distress Anomaly: Bankruptcy vs. Other Failures", with Yuhang Xing, Yan Yu.
- "Surrogate Residual of Multinomial Logistic Regression with Application to Discrete Choice Modeling", with Dungang Liu.
- "A General Approach for Measuring and Visualizing Uncertainty of Feature Selection, with Sheng Ren, Emily L. Kang, and Peng Wang.

Presentations

- "Surrogate R^2 for Probit Models", INFORMS Annual Meeting, Virtual, Nov 2020.
- "Demystifying Differences between Bankruptcy and Other Failures in Terms of Major Drivers and Risk-Return Relationship", Session Chair, INFORMS Annual Meeting, Seattle, WA, Oct 2019.
- "Conducting Inference of Coefficients and Model for High-Dimensional Sparse Linear Model", INFORMS 3rd Workshop on Data Science (Peer-Reviewed), Seattle, WA, Oct 2019.

- “Simultaneous Confidence Intervals Using Entire Solution Paths”, [The Fourth Workshop on Higher-Order Asymptotics and Post-Selection Inference \(WHOA-PSI\)](#), St. Louis, MO, August 2019.
- “Simultaneous Confidence Intervals Using Entire Solution Paths”, The Joint Statistical Meetings (JSM), Denver, CO, July 2019.
- “What drives Bankruptcy and Other Failures? An Analysis with Variable Selection”, INFORMS Annual Meeting, Data Science Workshop(Peer-Reviewed), Phoenix, AZ, November 2018.
- “Additive Logistic Model with Stochastic Macroeconomic Covariates for Corporate Bankruptcy Prediction”. The Joint Statistical Meetings (JSM), Baltimore, MD, August 2017.
- "Amplifying Creativity in Big Data Era: Relationship between creativity and failure". The 7th International Forum on Statistics, Beijing, China, 2016.

Teaching

Independent Instructor:

- BANA 7046 - Data Mining I (Graduate Level, Credit Hours: 3)
- Spring 2020 Class size: 29;
- BANA 7050 - Forecasting and Time Series Methods (Graduate Level, Credit Hours: 3)
- Spring 2020 Class size: 29;
- BANA 4090 - Forecasting and Risk Analysis (Credit Hours: 3)
- Fall 2019 Class size: 54;
- BANA 2081 - Business Analytics I (Credit Hours: 3)
- Spring 2018 Class size: 36;
- Fall 2018 Class size: 33.

Teaching Assistant:

- Statistical Modeling, Statistics Method (I & II), Business Analytics (I & II), Data Mining (I & II), Statistical Computing.

Awards

◦ 2021 Comer-Reynolds Memorial Award	<i>American Statistical Association</i>	2021
◦ GSG Research Fellowship	<i>University Award</i>	2019
◦ Chancellor's Scholarship	<i>University Award</i>	2014
◦ CFA Scholarship		2014
◦ Excellent Thesis	<i>University Award</i>	2013
◦ Several Excellent Students Awards	<i>University Award</i>	2007-2011
◦ Second Class Prize of Math Competition	<i>University Award</i>	2009
◦ National Scholarship for Encouragement	<i>National Award</i>	2008
◦ 2008 Beijing Olympic Game Outstanding Volunteer	<i>National Award</i>	2008
◦ Second Class Prize of National Olympiad in Informatics	<i>National Award</i>	2006

Working Experience

Adjunct Instructor <i>University of Cincinnati, OH</i> <i>Supervisor: Dr. Craig Froehle</i>	2020-2021
Research Assistant <i>The Pennsylvania State University, PA</i> <i>Supervisor: Dr. Kathryn W. Jablonski</i>	2014-2015
Research Assistant <i>Beijing University of Technology, Beijing</i> <i>Supervisor: Professor Li Xie</i>	2012-2013
Statistician <i>IMS Health Inc., Beijing</i>	2011-2012

Professional Service

Session Chair, "Data Science and Machine Learning: Methods and Applications" <i>INFORMS Annual Meeting 2019</i>	10/2019
Referee, <i>International Journal of Biostatistics, Journal of Data Science, Central European Journal of Economic Modelling and Econometrics, Managerial Finance, Applied Economics</i>	
President, <i>Student Chapter of INFORMS at University of Cincinnati</i>	07/2019 - Present
President, <i>BearStats Student Statistics Club, ASA Student Chapter at University of Cincinnati</i>	08/2020 - Present
Treasure, <i>The Lindner Graduate Students Association (LGSA), University of Cincinnati</i>	04/2017 - 04/2018
Vice-President/Fundraiser/Director of Liaison Department <i>Student Union, the Capital University of Economy and Business</i>	07/2009-07/2010
Volunteer <i>2008 Beijing Olympic Games</i>	06/2008-10/2008