Xiaorui (Jeremy) Zhu

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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

Working Paper:

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

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.
- "Robust Estimation with Cell-Wise Contamination or Missing Values", with Yichen Qin.
- "Additive Logistic Model with Stochastic Macroeconomic Covariates for Corporate Bankruptcy Prediction", with Yan Yu, Shaonan Tian.

Publications:

- Jablokow, 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'st likelihood. *Communication in Statistics:Theory and Methods*, 45(20), 6102-6111.
- Jablokow, K. W., **Zhu, X.**, Matson, J. V., & Kakde, A. N. (2016, June). Stimulating creativity in online learning environments through intelligent fast failure. In ASEE Annual Conference and Exposition, *Conference Proceedings* (Vol. 2016).

PRESENTATIONS

○ "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 drivers 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 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

○ GSG Research Fellowship	*University Award*	2019
○ Chancellor's Scholarship	*University Award*	2014
○ CFA Scholarship		2014
○ Excellent Thesis	*University Award*	2013
○ Several Excellent Students Awards	*University Award*	2007-2011
○ Second Class Prize of Math Competition	*University Award*	2009
○ National Scholarship for Encouragement	*National Award*	2008
○ 2008 Beijing Olympic Game Outstanding Volunteer	*National Award*	2008
○ Second Class Prize of National Olympiad in Informatics	*National Award*	2006

WORKING EXPERIENCE

Analyst (Research Assistant) 12/2014-12/2015
The Pennsylvania State University, PA
Supervisor: Professor Kathryn W. Jablokow

Research Assistant 11/2012-11/2013
Beijing University of Technology, Beijing
Supervisor: Professor Li Xie

Statistician 06/2011-03/2012
IMS Health Inc., Beijing

SERVICES

President *Student Chapter of INFORMS at University of Cincinnati*	07/2019 - Present
Vice President *BearStats Student Statistics Club, ASA Student Chapter at University of Cincinnati*	08/2017 - Present
Treasure *The Lindner Graduate Students Association (LGSA), University of Cincinnati*	04/2017 - 04/2018

Vice-President/Fundraiser/Director of Liaison Department 07/2009-07/2010
Student Union, the Capital University of Economy and Business

Volunteer 06/2008-10/2008
2008 Beijing Olympic Games