

RAO XIONG

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RESEARCH AREAS

Regression modeling, Bayesian statistics, Machine learning, Database analysis, and Applications of statistical principles in business, education, and psychology.

EDUCATION

University of Arizona

Aug., 2018-Now

Ph.D.in Statistics and Data Science, minor in Educational Psychology

AZ, USA

GPA: 3.95/4.0

Award: Teaching Assistantship

Aug., 2019-Dec., 2020

Graduate Associateship

Jan., 2020-July, 2023

University of Pennsylvania

Jan., 2017-Jun., 2018

M.S. in Statistics Measurement, Assessment and Research Technology

PA, USA

GPA: 3.2/4.0

Westminster College-Salt Lake City

Jan., 2012-Dec., 2015

B.A. in International Business, minor in Mathematics

UT, USA

GPA: 3.75/4.0

PUBLICATIONS

Kersting, N. B., **Xiong, R.**, Mercier, N., Demaree, M., & Wilson, R. Exploring the use of Bayesian networks to model noticing patterns for groups of teachers and changes in noticing patterns over time. *ZDM – Mathematics Education* 2026

Kersting, N. B., Smith, J. E., **Xiong, R.**, Vezino, B., & Mercier, N. (2022). Capturing, modeling, and conceptualizing usable teacher knowledge in mathematics. *AERA* 2022.

Xiong, R. (2022). Effect of Correlation Between Abilities Under Between-Item Dimensionality. *American Journal of Theoretical and Applied Statistics (Vol. 11, Issue Number 4, July 2022)*. ISSN: 2326-8999.

Li, J., Ying, W., **Xiong, R.**, & Ying, C. (2022). Project executive's ethical leadership and construction projects' social responsibility: Evidence from Wuhan, China. *Advances in Civil Engineering*, 2022(1), 6332424.

Xiong, R. (2017). Research on the Relationship between Salary and Performance of Professional Basketball Team (NBA) 8th *International Conference on E-business, Management and Economics (ICEME 2017)* ISBN:978-1-4503-5367-0

Xiong, R. and Xue H. (2017). Research on Resettlement and Resettlement of Water Conservancy Projects. *ICCTE'2017: 2nd International Conference on Civil, Transportation and Environment* ISSN 2352-5401(Advances in Engineering Research, Volume 135)

Xiong, R. (2017). The effects of Time Dimension and Interview Period Research on Sample Loss in SIPP.

IFACIT'2017: 2nd International Forum on Advances in Computer and Information Technology Atlantis Press ISSN

Xiong, R. (2016). Innovation of Financial Statistical Models in the Era of Big Data Time. *China Market* ISSN 1005-6432, CN11-3358/F (in Chinese)

Xiong, R. (2016). An Analysis of Yogurtland's Investment Prospects and Market Strategies in China. *Contemporary Economics* ISSN 1007-9378, CN42-1430/F (in Chinese)

Xiong, R. (2016). A Study of International E-Commerce's Influential Factors in the Era of Big Data Time. *Modern Business*. ISSN 1673-5889, CN11-5392/F (in Chinese)

INDUSTRY EXPERIENCE

Weiss-Rohlig USA

May, 2016-Dec., 2016

LAX Assistant Data Analyst

LA, USA

- Collected and investigated export-import data such as price fluctuation, booking-shipping-delivery, the number of containers among different industrials involving manufacturing, small-commodity trading, wood, heavy metal, etc through EXCEL
- Analyzed the potential sellers in China, freight routes, and prices of different shipping companies and advantages of different companies for customer companies
- Compiled summary reports based on data analysis and made presentations to our clients
- Dealt with hundreds of emails and tens of phone calls a day to communicate about flights and shipping

Survey Planning Design and Research Institute of Changjiang River

Feb., 2016-May, 2016

Assistant Statistician

Wuhan, China

- Investigated two towns of immigration regions of over 10,000 population, 300,000 acres of land
- Conducted statistical analysis on immigration population and land analysis through R and Excel
- Calculated the settlement allowance and compensations according to the national policies
- Accomplished and published the paper *Research on Resettlement and Resettlement of Water Conservancy Projects*

BDO China Shu Lun Pan CPAs (LLP)

Dec 2015-Jan 2016

Assistant Audit

Wuhan, China

- Participated in auditing Zhengzhou Sanqu Electrical Co., LTD and Majiang Hydropower Co.,LTD
- Checked monetary assets, real assets, bank statements, original bills and statistical analyzed financial data
- Evaluated financial assets
- Verified authenticity of monetary and real assets employing letter of certificate, real assets inventory methods

WORKING EXPERIENCE

Data Scientist at University of Arizona

Dec 2023 - Now

Data Scientist at the University of Arizona in the Department of Psychology and Education.

- Conduct statistical analyses in the project of Teachers as Learners – Teachers as Thinkers: Improving Classroom Communication in Mathematics with Professor Nicole Kersting.

GA at University of Arizona

Jan 2020-Dec 2023

Graduate Associate, Research at the University of Arizona in the Department of Psychology and Education.

- Conduct statistical analyses in the project of Classroom Video Analysis-Modified with Professor Nicole Kersting.
- Conduct statistical analyses in the project of Teachers as Learners – Teachers as Thinkers: Improving Classroom Communication in Mathematics with Professor Nicole Kersting.

GTA at University of Arizona

Aug 2019-Dec 2019

Graduate teaching Assistant for Undergraduate Math Courses

TA at Westminster College-SLC

Sep 2013-Dec 2015

TA for the Statistics course

- Supported the course, designed survey and examined data for department in need
- TA for courses in Microeconomics, Macroeconomics, and Accounting*
- Evaluated students' homework and exams; Helped solve challenging problems and ensure students to understand what are taught in class

QUALIFICATIONS

Computer Skills: Proficient in SPSS (3 years), Cristal Ball (1 year), R (8 years), MATLAB (1 year), Python(3 years), SQL (2 years)