

# BOWEN LIU

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## AFFILIATION INFORMATION

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Division of Computing, Analytics and Mathematics (CAM)  
School of Science and Engineering (SSE)  
University of Missouri-Kansas City (UMKC)

## EDUCATION

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<b>Ph.D. in Statistics</b>	<i>University of Nevada, Las Vegas</i>	<i>2018-2023</i>
<b>M.S in Statistics</b>	<i>University of Nevada, Las Vegas</i>	<i>2015-2017</i>
<b>B.A in Mathematics</b>	<i>University of Arizona</i>	<i>2013-2015</i>

## RESEARCH INTERESTS

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- Biostatistics
- Statistical Inference
- Statistical Distribution Theory with Applications
- Statistical Methods for Meta-Analysis
- Factor Analysis

## EXPERIENCE

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<b>Teaching Assistant</b>	<i>University of Nevada, Las Vegas</i>	<i>Sep 2018 - Dec 2022</i>
<b>Research Lab Assistant</b>	<i>Nevada Institute of Personalized Medicine</i>	<i>2022 Summer</i>
<b>Teaching Assistant</b>	<i>University of Nevada, Las Vegas</i>	<i>Sep 2018 - Dec 2022</i>
<b>Research Lab Assistant</b>	<i>Nevada Institute of Personalized Medicine</i>	<i>Feb 2018 - June 2018</i>
<b>Teaching Assistant</b>	<i>University of Nevada, Las Vegas</i>	<i>June 2015 - Dec 2017</i>
<b>Undergraduate Teaching Assistant</b>	<i>University of Arizona</i>	<i>Aug 2014-Dec 2014</i>

## SELECTED PUBLICATIONS

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- **Liu, B.**, & Ananda, M. M. A. (2023). A New Insight into Reliability Data Modeling with an Exponentiated Composite Exponential-Pareto Model. *Applied Sciences*, 13(1), 1.

- **Liu, B.**, Huynh, E., Li, C., & Wu, Q. (2022). Impact of COVID-19 on college students at one of the most diverse campuses in the USA: A factor analysis of survey data. *BMJ Open*, 12(9), e061719.

- **Liu, B.**, & Ananda, M.M.A. (2022). Analyzing insurance data with an exponentiated composite Inverse-Gamma Pareto Model. *Communications in Statistics - Theory and Methods*, DOI: 10.1080/03610926.2022.2050399

- **Liu, B.**, & Ananda, M. M. A. (2022). A Generalized Family of Exponentiated Composite Distributions. *Mathematics*, 10(11), 1895.

- Mun, H., **Liu, B.**, Pham, T., & Wu, Q. (2020). C-reactive protein and fracture risk: an updated systematic review and meta-analysis of cohort studies through the use of both frequentist and Bayesian approaches. *Osteoporosis international*, 32(3), 425–435

- **Liu, B.**, Wu, Q., Zhang, S., & Del Rosario, A. (2019). Lithium use and risk of fracture: a systematic review and meta-analysis of observational studies. *Osteoporosis international*, 30(2), 257–266.

- Wu, Q., **Liu, B.**, & Tonmoy, S. (2018). Depression and risk of fracture and bone loss: an updated meta-analysis of prospective studies. *Osteoporosis international*, 29(6), 1303–1312.

## OTHER PUBLICATIONS

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- Wu, Q., Mun, H., & **Liu, B.** (2021). Clarification of some issues using Bayesian methods and model selection in meta-analysis and reporting. *Osteoporosis international*, 32(10), 2137–2138.
- Li, C., Yang, Y., Wu, Q., Zhang, S., & **Liu, B.** (2020). Teachers' Self-Efficacy and Technology Integration in K-12 Education: A Meta-Analysis. *CRITICAL ISSUES IN TEACHER EDUCATION: The Journal of the Illinois Association of Teacher Educators*, 27, 27–39.
- Wu, Q., **Liu, B.**, & Tonmoy, S. (2018). Depression and risk of fracture and bone loss: an updated meta-analysis of prospective studies. *Osteoporosis international*, 29(6), 1303–1312.

## CONFERENCE AND SYMPOSIUM PRESENTATIONS

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- **Liu, B.**, Yang, Y., Li, Q., Yueyang, & Wu, Q. (2023, Jan 6-8). Bisphosphonates use and risk of atypical femoral fractures: a meta-analysis of cohort and case-control studies with both frequentist and Bayesian approaches, Paper presented at: 2023 International Conference on Health Policy Statistics, Scottsdale, AZ, United States.
- **Liu, B.**, & Ananda, M.M.A. (2022, Oct 15). Location Parameter Selection for Generalized Pareto distribution with Accumulation Tests. Paper presented at: 2022 Fall Symposium and Annual Meeting - American Statistical Association (ASA) Nevada Chapter, Las Vegas, NV, United States.
- **Liu, B.**, Ananda, M.M.A. (2022, Aug 3-6). The Application of Accumulation Tests in Peaks Over Threshold Modeling with Norwegian Fire Insurance Data. Conference talk at: 2022 Actuarial Research Conference, Champagne, IL, United States
- **Liu, B.** & Wu, Q. (2021, October 1-4). Detecting Gene-Environment Interactions Using Variance Component Selection Method: An Application in MrOS Data. Poster presented at: The American Society of Bone Mineral Research 2021 Annual Meeting; San Diego, CA, United States.
- **Liu, B.**, Mun, H., Pham, T., & Wu, Q. (2018, Oct 13). The Association Between High Sensitivity C-Reactive Protein and Risk of Fracture: A Meta-Analysis. Paper presented at: 2018 Fall Symposium and Annual Meeting - American Statistical Association (ASA) Nevada Chapter, Las Vegas, NV, United States.
- **Liu, B.**, Zhang, S., Del Rosario, A., & Wu, Q. (2018, May 18). Lithium use and risk of fracture: a systematic review and meta-analysis of observational studies. Paper presented at: 2018 Nevada Institute of Personalized Medicine (NIPM) Annual Symposium, Las Vegas, NV, United States.

## COURSE EVALUATIONS (UNLV RECORD)

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Semester	Course-Section Number	Course Name	Number of Students	Evaluation
Spring 2020	MATH 120-1010	Fundamentals of College Algebra (Lecture)	29	4.53/5.00
Spring 2020	MATH 120-1014	Fundamentals of College Algebra (Lecture)	28	4.35/5.00
Fall 2020	MATH 120-1014	Fundamentals of College Algebra (Lecture)	39	4.13/5.00
Fall 2020	STAT 411-1008	Statistical Methods I (Discussion)	22	3.48/5.00
Fall 2020	STAT 411-1009	Statistical Methods I (Discussion)	17	4.05/5.00
Spring 2021	STAT 391-1002	Applied Statistics for Biology (Discussion)	23	4.08/5.00
Spring 2021	STAT 391-1003	Applied Statistics for Biology (Discussion)	21	3.63/5.00
Spring 2021	STAT 391-1004	Applied Statistics for Biology (Discussion)	23	3.88/5.00
Spring 2021	STAT 391-1008	Applied Statistics for Biology (Discussion)	18	4.38/5.00
Summer 2021	STAT 391-1001	Applied Statistics for Biology (Lecture)	18	4.30/5.00
Fall 2021	STAT 152-1001	Introduction to Statistics (Lecture)	23	4.59/5.00
Fall 2021	STAT 152-1002	Introduction to Statistics (Lecture)	44	3.61/5.00
Spring 2022	STAT 152-1002	Introduction to Statistics (Lecture)	44	4.19/5.00
Spring 2022	MATH 120-1009	Fundamentals of College Algebra (Lecture)	18	4.53/5.00