

Meng (Chris) Qiu

CONTACT INFORMATION	University of California, Merced SSM 362A, 5200 North Lake Road, Merced, CA 95343 Email: mengqiu@ucmerced.edu	
POSITIONS	University of California, Merced Assistant Professor, Department of Psychological Sciences	2024 - present
EDUCATION	Ph.D. in Quantitative Psychology, University of Notre Dame <i>Advisor: Dr. Ke-Hai Yuan</i>	2018 - 2024
	M.S. in Applied and Computational Mathematics and Statistics, University of Notre Dame <i>Advisor: Dr. Lizhen Lin</i>	2019 - 2022
	M.A. in Measurement, Statistics and Evaluation, University of Maryland <i>Advisor: Dr. Gregory R. Hancock</i>	2014 - 2016
	B.S. in Agricultural and Resources Economics, University of Maryland	2012 - 2014
	B.A. in Regional Development in Rural Area, China Agricultural University	2010 - 2012
RESEARCH INTERESTS	Bayesian Nonparametrics, Mixture Modeling, Longitudinal Data Analysis, Missing Data, Machine Learning, Causal Inference	
PUBLICATIONS (†STUDENT MENTEE)	<i>Methodology</i> 5. Depaoli, S., Qiu, M. , Liu, H., & Jauregui, M. (2026). Class selection in growth mixture models: Comparing information criteria to nonparametric and parametric Bayesian approaches. <i>Structural Equation Modeling: A Multidisciplinary Journal</i> , 33(1), 64–80. doi.org/10.1080/10705511.2025.2563187 4. Qiu, M. , Paganin, S., Ohn, I., & Lin, L. (2025). Bayesian nonparametric latent class analysis with different item types. <i>Psychological Methods</i> . Advance online publication. doi.org/10.1037/met0000728 3. Qiu, M. & Yuan, K.-H. (2024). Label switching in latent class analysis: Correct assignment of individuals, accuracy of parameter estimates and confidence intervals. <i>Structural Equation Modeling: A Multidisciplinary Journal</i> , 31(2), 217–232. doi.org/10.1080/10705511.2023.2213842 2. Qiu, M. , Paganin, S., Ohn, I., & Lin, L. (2023). Bayesian nonparametric latent class analysis for different item types. <i>Multivariate Behavioral Research</i> , 58(1), 156-157. doi.org/10.1080/00273171.2022.2160958 1. Yu, M., Li, Y., & Qiu, M. (2019). Statistical inference of the relative concentration index for complex surveys. <i>Statistics in Medicine</i> , 38(21), 4083-4095. doi.org/10.1002/sim.8284	

Tutorial

1. **Qiu, M.** (2022) A tutorial on Bayesian latent class analysis using JAGS. *Journal of Behavioral Data Science*, 2(2), 127-155. doi.org/10.35566/jbds/v2n2/qiu

Application

3. Liu, Q., **Qiu, M.**, Nestor, B. A., Rodriguez, V. J., & Cole, D. A. (2024). Mixture model applications in depression phenotyping: practices, challenges, and recommendations. *Current Psychology*, 43(33), 27006-27020. doi.org/10.1007/s12144-024-06309-6
2. Zhao, W., Ding, F., & **Qiu, M.** (2024). Can the spatial structure of a metropolitan area bring regional economic benefits?—A case study of Melbourne. *Applied Economics*, 1-16. doi.org/10.1080/00036846.2024.2304656
1. Salamanca-Balen, N., **Qiu, M.**, & Merluzzi, T. V. (2021). COVID-19 pandemic stress, tolerance of uncertainty and well-being for persons with and without cancer. *Psychology & Health*, 38(10), 1402–1419. doi.org/10.1080/08870446.2021.2020273

SELECTED WORKING PAPERS

5. **Qiu, M.** & Yuan, K.-H. (under review). What can bootstrap do in latent class analysis? A whole-process bootstrap framework.
4. **Qiu, M.**, Paganin, S., Ohn, I., & Lin, L. (under review). Frequently asked questions about Dirichlet process mixture modeling.
3. **Qiu, M.**, Liu, R., & Jia, F. (under drafting). A Bayesian nonparametric multiple imputation method for handling missing data in item response theory.
2. **Qiu, M.** & Yao, W. (under drafting). Frequently asked questions about label switching in mixture modeling.
1. **Qiu, M.** & Si, Y. (under drafting). A unified Bayesian nonparametric approach to multiple imputation: A tutorial in NIMBLE.

CONFERENCE PRESENTATIONS AND POSTERS ([†]STUDENT MENTEE)

6. **Qiu, M.**, Jia, F., & Liu, R. (2026, June). *A Bayesian nonparametric multiple imputation method for handling missing data in item response theory*. Talk presented at the 2026 Modern Modeling Methods Conference, Fordham University, NY.
5. **Qiu, M.**, Paganin, S., Ohn, I., & Lin, L. (2022, October). *Bayesian nonparametric latent class analysis for different item types*. Poster presented at the 2022 Annual Society of Multivariate Experimental Psychology Conference, Monterey, CA.
4. **Qiu, M.** (2017, July). *A Bayesian zero-inflated Poisson regression analysis on campus security*. Poster presented at the 2017 International Meeting of the Psychometric Society, University of Zürich, Switzerland.
3. Yu, M., Li, Y., & **Qiu, M.** (2017, May). *Variance estimation of health disparity measures in complex survey settings*. Talk presented at the 2017 Modern Modeling Methods Conference, University of Connecticut, CT.
2. **Qiu, M.**, & Hancock, G. R. (2017, April). *Robustness of structural means model to non-normality*. Talk presented at the 2017 American Educational Research Association Annual Meeting, San Antonio, TX.

1. Man, K. W., Jiao, H., & **Qiu, M.** (2016, May). *Modeling directional local item dependence*.
Talk presented at the 2016 Modern Modeling Methods, University of Connecticut, CT.

HOHORS AND AWARDS	Society of Multivariate Experimental Psychology (SMEP) Travel Award		2022
	<i>The 2022 SMEP Annual Meeting</i>		
	Psychology Department’s Excellence in Graduate Student Teaching Award		2021
	<i>University of Notre Dame</i>		
	Graduate Student Travel Award		2016
	<i>University of Maryland</i>		
	Ray A. Murray Scholarship Fund		2012 - 2013
	<i>University of Maryland</i>		
RESEARCH GRANTS	Academic Senate Faculty Research Grant. (2026 - 2027). University of California, Merced. “Generative AI for Monte Carlo Simulation Studies in the Social Sciences.” Principal Investigator, \$7,500.		
PROFESSIONAL EXPERIENCE	Department of Psychology, University of Notre Dame		
	Statistical Consultant		<i>Jun 2022 - Aug 2022</i>
	Avar Consulting, Rockvill, MD		
	Research Analyst		<i>Jan 2016 - Jul 2018</i>
	Joint Program in Survey Methodology, University of Maryland		
	Faculty Assistant		<i>Jan 2016 - May 2017</i>
TEACHING	University of California, Merced		
	PSY 290 Statistical Programming in R	Role: Course Instructor	<i>Spring 2026</i>
	PSY 010 Analysis of Psychological Data	Role: Course Instructor	<i>Spring 2026</i>
			<i>Fall 2025</i>
			<i>Spring 2025</i>
			<i>Fall 2024</i>
	University of Notre Dame		
	PSY 63199 Grad Seminar: Quantitative Study	Role: Course Instructor	<i>Spring 2024</i>
			<i>Fall 2023</i>
			<i>Spring 2023</i>
			<i>Fall 2022</i>
			<i>Spring 2022</i>
PSY 30100 Experimental Psychology I: Statistics	Role: Teaching Assistant	<i>Fall 2021</i>	
		<i>Spring 2021</i>	
		<i>Fall 2020</i>	
		<i>Spring 2020</i>	

MENTORING (* GRADUATED)	Ph.D. Students		
	Ihnwhi Heo	Role: Dissertation Committee Member	2025 - present
	Madelin Jauregui	Role: Candidacy Project Committee Member	2025 - present
	Aleksandr Ivanov	Role: Master Thesis Committee Member	2024 - 2025
ACADEMIC SERVICE	Journal Reviewer: Psychometrika, British Journal of Mathematical and Statistical Psychology, British Journal of Psychology, Structural Equation Modeling, Journal of Behavioral Data Science, Methods in Psychology, American Educational Research Association		
LANGUAGE	English, Chinese		
REFERENCES	Ke-Hai Yuan, Professor, Department of Psychology, University of Notre Dame, kyuan@nd.edu Zhiyong Zhang, Professor, Department of Psychology, University of Notre Dame, zzhang4@nd.edu Lizhen Lin, Professor, Department of Mathematics, University of Maryland, lizhen01@umd.edu		