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EDUCATION

2006 Ph.D. in Statistics, minor in Marketing, The Ohio State University.
1995 M.S. in Statistics, The Ohio State University.
1993 Bachelor of Science, University of Science and Technology of China.

ACADEMIC POSITIONS

2020 – Present Associate Professor, and UW Foundation Chairman Orr-Bascom Professor
 University of Wisconsin-Madison
2015 – 2020 Associate Professor (with tenure), Department of Marketing
 University of Wisconsin-Madison
2007 – 2015 Assistant Professor, Department of Marketing
 University of Wisconsin-Madison
2006 – 2007 Postdoctoral Fellow, Department of Marketing
 The Ohio State University

RESEARCH PUBLICATIONS (*denotes peer reviewed articles; †denotes equal authorship)

- 1.* Zhang, Qiong, Peter Chien, Qing Liu, Li Xu and Yili Hong (2021), "Mixed-input Gaussian process emulators for computer experiments with a large number of categorical levels", *Journal of Quality Techonolgy*, 53 (4), 410-420.
- 2.* Chen, Yan[†], Ryan Qi[†], Qing Liu[†] and Peter Chien (2018), "Sequential Sampling Enhanced Composite Likelihood Approach to Estimation of Social Intercorrelations in Large-Scale Networks", *Quantitative Marketing and Economics*, 16 (4), 409-440.
- 3.* Chandukala, Sandeep[†], Jeff Dotson[†], and Qing Liu[†] (2017), "An Assessment of When, Where and Under What Conditions In-Store Sampling is Most Effective", *Journal of Retailing*, 93 (4), 493-506.
- 4.* Henderson, Ty and Qing Liu (2017)[†], "Efficient Design and Analysis for a Selective Choice Process", *Journal of Marketing Research*, 54 (3), 430-446.
- 5.* Mallapragada, Girish, Sandeep Chandukala and Qing Liu (2016), "Exploring the Effects of What (Product) and Where (Website) Characteristics on Online Shopping Behavior", *Journal of Marketing*, 80 (2), 21-38.
- 6.* Xu, Xu, Peter Qian and Qing Liu (2016), "Samurai Sudoku-based Space-filling

Designs for Multi-source Inference", *The American Statistician*, 70, 1-8.

- 7.* Liu, Qing and Yihui (Elina) Tang (2015)[†], "Construction of Efficient Heterogeneous Choice Designs: A New Approach", *Marketing Science*, 34 (3), 346-366.
- 8.* Chandukala, Sandeep[†], Jeff Dotson[†], Qing Liu[†] and Stefan Conrady (2014), "Exploring the Relationship Between Online Search and Offline Sales for Better 'Nowcasting'", *Customer Needs and Solutions*, 1 (3), 176-187.
- 9.* Liu, Qing, Angela M. Dean and Greg M. Allenby (2012), "Bayesian Designs for Hierarchical Linear Models", *Statistica Sinica*, 22 (1), 393-417.
- 10.* Arora, Neeraj, Ty Henderson and Qing Liu (2011), "Non-compensatory Dyadic Choices", *Marketing Science*, 30 (6), 1028-1047.
- 11.* Liu, Qing and Neeraj Arora (2011), "Efficient Choice Designs for a Consider-Then- Choose Model", *Marketing Science*, 30 (2), 321-338.
- 12.* Liu, Qing, Angela M. Dean, David Bakken and Greg M. Allenby (2009), "Studying the Level-Effect in Conjoint Analysis: Application of Efficient Experimental Designs for Hyperparameter Estimation", *Quantitative Marketing and Economics*, 7, 69-93.
- 13.* Liu, Qing, Angela M. Dean and Greg M. Allenby (2007), "Design for Hyperparameter Estimation in Linear Models", *Journal of Statistical Theory and Practice*, 1 (3) 311-328.
- 14.* Liu, Qing, Thomas Otter and Greg M. Allenby (2007), "Investigating Endogeneity Bias in Marketing", *Marketing Science*, 26 (5) 642-650.

BOOK CHAPTER AND CONFERENCE PROCEEDINGS

15. Liu, Qing (2010), "Models for upper levels of a hierarchy", in *Bayesian Analysis in Marketing: A breakthrough in customer analytics*, The Marketing & Management Collection, Allenby, G.M. and Rossi, P.E. (eds), Henry Stewart Talks Ltd, London (online at <http://hstalks.com/?t=MM0992327-Liu>)
- 16.* Liu, Qing, Thomas Otter and Greg M. Allenby (2009), "Measurement of Self- and Cross-price Effects", in *Handbook on Research on Pricing*, Vithala R. Rao, Editor, E-Elgar Publishers.
17. Liu, Qing, Otter, Thomas, Allenby, Greg M (2007). "Endogeneity Bias -- Fact or Fiction? ", 345-354. *Sawtooth Software Conference Proceedings 2007*.

WORKING PAPERS AND SELECTED WORK IN PROGRESS

18. "A Representative Sampling Method for the Peer Encouragement Design of Network Experiments", with Yanyan Li and Sha Yang, under 3rd round review at *Marketing Science*.

19. "Amplifier or Detractor? The Impacts of Pop-Up Shops on Hosting Malls and Their Permanent Tenants", with Carol Liu and Cheng He.
20. "Gaining Deeper Insights into Thin Profile Consumers via Attributed Graph Contrastive Learning", with Jiyeon Hong and Wenjun Zhou.
21. "The effect of critical transformation on undergraduate students' argumentative synthesis", with Qin Zhou, Liang Chen, Fei Zhang and Jianghua Liu.
22. "Attitude-Action Gap in Consumer Choice of Sustainable Products: Mechanism and Mitigation Strategies", with Jungeun Lim and Neeraj Arora.
23. "Let's Support More but Different! How a Diversified Cause Portfolio Affects Brands Engaging in Corporate Sociopolitical Activism", with Kaiyang Wu and Page Moreau.
24. "Front-of-Package Nutrition Labeling and Consumer Choice", with Youngju Kim and Ty Henderson.
25. "Forecasting with Multiple Data Sources Using a Novel Window Adaptive Time Series Model", with Zheng Zhang and Wenjun Zhou.
26. "Investigating the Impact of Prognostic Uncertainty on Physicians' Decision Making ", with Jacqueline Kruser and Anica Law.

INVITED PRESENTATIONS

"Gaining Deeper Insights into Thin Profile Consumers via Attributed Graph Contrastive Learning"

-- The Ohio State University, Marketing Department, 10/2024.

"A Representative Sampling Method for the Peer Encouragement Design of Network Experiments"

-- The Ohio State University, Statistics Department, 10/2024.

-- Medical College of Wisconsin, 9/2024.

-- Joint Statistics and Marketing Seminar, Purdue University, 4/2023.

-- International Conference on Design of Experiments, Memphis, Tennessee, 5/2023.

-- Systems, Information, Learning and Optimization (SILO) research group, University of Wisconsin-Madison, 5/2022.

"Efficient Choice Designs Under Heterogeneous Variable Selection"

--Design and Analysis Conference, University of Tennessee-Knoxville, 10/2019.

--3rd International Conference on Econometrics and Statistics, Taiwan, 6/2019.

--8th International Conference on Risk Analysis and Design of Experiments, Vienna, 4/2019.

"Efficient Analysis for Multivariate Binary Data with Pólya Gamma Auxiliary Variables"

--China Marketing International Conference, 7/2019.

"An Active-Learning-Inspired Approach for Estimation of Social Intercorrelations in Large-Scale Networks"

--Marketing Research Camp, Korea University, Korea, 5/2018.

"Sequential Sampling Enhanced Composite Likelihood Approach to Estimation of Social Intercorrelations in Large-Scale Networks"

--Singapore Management University, Singapore, 3/2017.

--The 2nd Pacific Rim Statistical Conference, National Seoul University, Korea, 12/2016.

--Zhejiang University, China, 12/2016.

"Efficient Design and Analysis for a Selective Choice Process"

--Design and Analysis of Experiments Conference, Cary, NC, 3/2015.

"Sequential Sampling Enhanced Composite Likelihood Approach to Estimation of Social Intercorrelations in Large-Scale Networks"

--Indiana University, Georgia State University, University of Iowa, University of Hong Kong, Virginia Tech, 10/2014--11/2014.

"Heterogeneous Designs for Hierarchical Choice Models"

--Design and Analysis of Experiments Conference, Atlanta, GA, 10/2012.

"Optimal Experimental Designs for Hierarchical Models"

--The Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, 8/2011. (Scheduled but cancelled in 7/2011 due to personal health issues)

"Efficient Designs for a Non-Compensatory Choice Model"

--Design and Analysis of Experiments Conference, Columbia, MO, 10/2009.

--Department of Statistics, University of Wisconsin-Madison, 9/2009.

"Modeling the 'Level Effect' in Market Research Studies: A Hierarchical Bayes Approach"

--Department of Decision and Information Technology, Smith School of Business, University of Maryland, 2/2006.

"Optimal Experimental Designs for Efficient Hyperparameter Estimation in Marketing"

--School of Business, University of Wisconsin-Madison, 11/2005.

--Wharton School of Business, University of Pennsylvania, 10/2005.

"Conjoint Studies – The 'Level Effect' and Experimental Designs"

--International Conference on Design of Experiments, Memphis, Tennessee, 5/2005.

"Applications of Experimental Designs in the Credit Card Industry"

--The First Midwest Conference on Design of Experiments, Columbus, OH, 5/2000.

CONTRIBUTED CONFERENCE PRESENTATIONS (*denotes presentations by coauthors)

* "Exploring the Sustainability Intention-Action Gap in Consumer Packaged Goods via the Utility Maximization Framework"

--INFORMS Marketing Science Conference, Sydney, Australia, 6/2024.

* "Unveiling Store Network Dynamics: A Graph Perspective of Offline Retailing Activities"

--INFORMS Marketing Science Conference, Sydney, Australia, 6/2024.

* "How to Mitigate the Attitude-Action Gap in Consumer Choice of Sustainable Products?"

--Theory+Practice in Marketing (TPM) Conference, Austin, Texas, 5/2024.

* "Front-of-Package Nutrition Labeling Standards and Consumer Choice:

- The Moderating Role of Processing Fluency"
 --EMAC Annual Conference, Odense, Denmark, 5/2023.
 --Theory+Practice in Marketing (TPM) Conference, Lausanne, Switzerland, 5/2023.
- * "Encouraging Donors to Donate in Donation-based Crowdfunding: A Network Representation Learning Approach"
 --INFORMS Marketing Science Conference, Virtual, 6/2022.
- * "Are Pop-up Stores Popping Up to Attract Traffic and Sales: An Empirical Examination of the Causal Impact at Both Mall and Store Levels"
 --INFORMS Marketing Science Conference, Virtual, 6/2022.
- "A Representative Sampling Method for Causal Inference in Social Network Experiments"
 --Annual Joint Statistical Meetings, Virtual, 8/2021.
 --* INFORMS Marketing Science Conference, Virtual, 6/2021.
- * "How to Encourage Donors to Return: Uncover Different Motivations for Donation in Crowdfunding for Nonprofit Organizations"
 --INFORMS Marketing Science Conference, Virtual, 6/2021.
- * "Heterogeneous Regularization and Classification Models for Panel Data"
 --INFORMS Marketing Science Conference, Philadelphia, PA, 6/2018.
- * "Efficient Analysis for Multivariate Binary Data with Pólya Gamma Auxiliary Variables"
 --INFORMS Marketing Science Conference, Los Angeles, CA, 6/2017.
- * "Efficient Design and Analysis for a Selective Choice Process"
 --INFORMS Marketing Science Conference, Baltimore, MD, 6/2015.
- * "Sequential Sampling Enhanced Composite Likelihood Approach to Estimation of Social Interrelations in Large-Scale Networks"
 --Big Data Marketing Analytics Conference, University of Chicago, 10/2014.
- "Construction of Efficient Heterogeneous Choice Designs: A New Approach"
 --AMA Advanced Research Techniques Forum, Santa Fe, NM, 6/2014.
- "Design and Analysis for a Selective Choice Process"
 --INFORMS Marketing Science Conference, Boston, MA, 6/2012.
- "Heterogeneous Designs for Hierarchical Choice Models"
 --INFORMS Marketing Science Conference, Cologne, Germany, 6/2010.
- "Efficient Designs for a Non-Compensatory Choice Model"
 --Annual Joint Statistical Meetings, Vancouver, Canada, 8/2010.
 --AMA Advanced Research Techniques Forum, San Francisco, CA, 6/2010.
 --INFORMS Marketing Science Conference, Ann Arbor, MI, 6/2009.
- "Studying the 'level-effect' in Conjoint Analysis: An Application of Efficient Designs for Hyperparameter Estimation"
 --Joint Statistical Meeting, Denver, CO, 8/2008.
 --AMA Advanced Research Techniques Forum, Asheville, NC, 6/2008.
 --INFORMS Marketing Science Conference, Vancouver, Canada, 6/2008.
- "Optimal Experimental Designs for Hyperparameter Estimation in Hierarchical Linear Models"

- Design and Analysis of Experiments Conference, Memphis, TN, 10/2007.
- Design and Analysis of Experiments Conference, Santa Fe, NM, 10/2005.
- Annual Joint Statistical Meetings, Minneapolis, MN, 8/2005.

TEACHING

Gaumnitz Distinguished Faculty Teaching Award, Wisconsin School of Business, 2022.
 Data Visualization for Business Analytics (MSBA, MBA and PMBA), 2019-present.
 -- *Recent instructor rating: 4.61/5, 4.93/5.*
 Marketing Research (Undergraduate and MBA), 2004 -2005, 2008- present.
 -- *Recent instructor ratings: 4.53/5 and 4.78/5.*
 Data to Decisions (MBA Core Class), 2008, 2009.

HONORS/AWARDS

Gaumnitz Distinguished Faculty Teaching Award, Wisconsin School of Business, 2022.
 Junior Researcher Award, Design and Analysis of Experiments Conference, 2012, 2009, 2007, 2005.
 Best Paper Award, AMA Advanced Research Techniques (ART) Forum, 2010.
 Finalist, Edward F. Hayes Graduate Research Forum, 2006.
 Junior Researcher Award, The First Midwest Conference on Design of Experiments, 2000.

PATENT & GRANTS

US Patent Application No. 18/622, 610, filed 3/29/2024, pending.
 Graduate School Research Grant (\$34,409), University of Wisconsin-Madison, 2020.
 Vilas Life Cycle Professorship Grant (\$29,998), University of Wisconsin-Madison, 2013.
 Graduate School Research Grant (\$25,934), University of Wisconsin-Madison, 2012.
 Graduate School Research Grant (\$30,387), University of Wisconsin-Madison, 2011.
 Graduate School Research Grant (\$28,975), University of Wisconsin-Madison, 2010.

PROFESSIONAL SERVICE

Associate Editor: *Quantitative Marketing and Economics* (2021-present)
 Editorial Review Board:
Journal of Retailing (2022-present)
Asia Marketing Journal (2021-present)
Customer Needs and Solutions (2014-present)
 Co-chair, Marketing Analytics Track, AMA Summer Marketing Educator's Conference, 2020.
 Co-chair, Statistics and Marketing Section, China Marketing International Conference, 2019, 2022.
 Chair-elect and chair, Section on Statistics in Marketing, American Statistical Association, 2015, 2017.
 Co-chair, Research Methods and Analytics Track, AMA Summer Marketing Educator's Conference, 2013.
 Ad-hoc Reviewer:
 --*Marketing Science, Management Science, Journal of Marketing Research, Journal*

of Marketing, Journal of Consumer Research, Journal of American Statistical Association, Journal of Business and Economic Statistics, Quantitative Marketing and Economics, Annals of Applied Statistics, International Journal of Research in Marketing, Journal of Business Research, Communications in Statistics: Theory and Methods, Networks and Spatial Economics, Information Systems Journal,.

UNIVERSITY, SCHOOL AND DEPARTMENTAL SERVICE

Chair, Marketing Department PhD Program Committee (2020-2023)
Chair, Marketing Department Faculty Search Committee (2019, 2020)
Member, Marketing Department PhD Program Committee (2020-present)
Member, WSB Analytics Faculty Search Committee (2020)
Member, WSB Diversity, Equity and Inclusion Committee (2020-2022)
Member, Data Science Institute American Family Insurance Research Proposal Review Committee (2020, 2021)
Member, Master's Program Review Criteria Task Force (2019)
Member, Master's Curriculum Committee, School of Business (2013-2015)
Member, Marketing Department Undergraduate KDBIN Committee (2013)
Member, Marketing Department Faculty Search Committee (2012, 2013)
Member, Marketing Department Ph.D. Program committee (2011, 2012)
Member, Marketing Department Undergraduate Scholarship Committee (2011-2016)

Dissertation chair/co-chair for:

Sean Melessa (2021, *placement: Pennsylvania State University*)
Jiyeon Hong (2022, *placement: George Mason University*)
Kaiyang Wu (2022, *placement: University of Nevada, Las Vegas*)
Nathan Zhi Huang (2022, *placement: Google*)
Carol Liu (expected to graduate in May 2025)
Jungeun Lim (expected to graduate in May 2027)

Dissertation committee member for:

--Ph.D. students in Marketing
Srinivas Tunuguntla (2022), Linge Xia (2022), Min Tian (2019), Lin Bao (2013), Victor Barger (2011), MoonYoung Kang (2010)

--Ph.D. student in Economics
Zhentong Lu (2016)

--Ph.D. student in Operations and Information Management
Xiao Ma (2014)

--Ph.D. students in Statistics
Yanbo Shen (2022), Tzu Hsiang Hung (2021), Youran Qi (2019), Timothy Idowu (2016), Yan Chen (2015), Vincent Chan (2015), Jiajie Chen (2014), Qiong Zhang (2014), Xu Xu (2013), Youngdeok Hwang (2012), Jun Li (2010)

External Appraiser of PhD dissertation for:

Connor Campbell (2023, Department of Economics, University of Toronto)

INDUSTRY EXPERIENCE

JPMorgan Chase, New York, NY

9/2003 – 9/2004 Vice President, Risk and Knowledge Management

RCI, Cendant Corp., Parsippany, NJ

5/2001 – 9/2003 Manager, Database Marketing

Capital One Financial Corp., Richmond, VA

5/1999 – 4/2001 Senior Statistician Manager, Marketing and Analysis

3/1998 – 5/1999 Statistician Manager, Marketing and Analysis

1/1996 – 3/1998 Statistician, Marketing and Analysis