Qing (Wendy) Wang

Office Phone: 781-283-3397 Email: qwang@wellesley.edu

Education

Ph.D. in Statistics

08/2012

Department of Statistics, The Pennsylvania State University

State College, PA 16802

Advisor: Bruce G. Lindsay, Professor and Holder of the Eberly Chair in Statistics Dissertation: Investigation of topics in U-statistics and their applications in risk estimation and cross-validation

M.S. in Statistics 12/2010

Department of Statistics, The Pennsylvania State University State College, PA 16802

B.S. in Statistics 07/2007

Department of Statistics, School of Mathematical Sciences Beijing Normal University, Beijing, China

Academic Appointments

Associate Professor of Statistics (tenured)

09/2020 – Present

Department of Mathematics & Statistics

Wellesley College

Assistant Professor of Statistics (tenure-track)

07/2016 - 08/2020

Department of Mathematics & Statistics

Wellesley College

Assistant Professor of Mathematical Sciences (tenure-track) 07/2015 - 06/2016

Department of Mathematical Sciences

Bentley University

Assistant Professor of Statistics (tenure-track)

07/2012 - 06/2015

Department of Mathematics & Statistics

Williams College

Publications

Peer-Reviewed Journals:

- Z. Chen* and Q. Wang (2025). An improved two-stage binary relevance algorithm for multilabel classification. *Journal of Applied Statistics*. DOI: 10.1080/02664763.2025.2567977
- 2. M. Ordal* and Q. Wang (2025). Enhancing diversity and improving prediction performance of subsampling-based ensemble methods. Stats,~8(4): 86. DOI: 10.3390/stats8040086
- 3. Q. Wang and X. Cai (2025). A new perspective on U-statistic variance estimation. $Stat,\ 14$ (2), e70070. DOI: 10.1002/sta4.70070
- 4. S. Ning, A. Hussain*, and Q. Wang (2024). Incorporating connectivity among internet search data for enhanced influenza-like illness tracking. $PLoS\ ONE\ 19(8)$: e0305579. DOI: 10.1371/journal.pone.0305579
- 5. J. Hu*, M. DeSimone*, and Q. Wang (2024). Utilizing latent connectivity among mediators in high-dimensional mediation analysis. *Stat*, 13(2), e675. DOI: 10.1002/sta4.675
- 6. X. Cai, Q. Wang, and Y. Zhu (2023). Mediation analysis with latent factors using simultaneous group-wise and parameter-wise penalization. Stat, 12(1), e630. DOI: $10.1002/\mathrm{sta}4.630$

^{*:} student co-authors.

- 7. Q. Wang and X. Cai (2023). Active-learning class activities and Shiny applications for teaching support vector classifier. *Journal of Statistics and Data Science Education*. DOI: 10.1080/26939169.2023.2231065
- 8. Q. Wang and X. Cai (2023). Online repository for facilitating teaching and learning of undergraduate statistical modeling tools. Proceedings of the 9th international conference on higher education advances (HEAd'23). Editorial Universitat Politècnica de València, Valencia, Spain. DOI: 10.4995/HEAD23.2023.16871
- 9. A. Zambom and Q. Wang (2023). Testing independence between discrete random variables. *Communications in Statistics-Theory and Methods*, 52(3): 956-971. DOI: 10.1080/03610926.2021.1934026
- Q. Wang and Y. Wei* (2022). Quantifying uncertainty of subsampling-based ensemble methods under a U-statistic framework. Journal of Statistical Computation and Simulation, 92 (17): 3706-3726. DOI: 10.1080/00949655.2022.2081969
- 11. A. Zambom, Q. Wang, and R. Dias (2022). A basis approach to surface clustering. Statistics, Optimization, and Information Computing, 10(2): 339-351. DOI: 10.19139/soic.v10i2
- 12. Q. Wang and X. Cai (2021). An efficient variance estimator for cross-validation under partition-sampling. *Statistics*, 55(3): 660-681. DOI: 10.1080/02331888.2021.1943393
- Q. Wang and A. Guo* (2020). An efficient variance estimator of AUC with applications to binary classification. Statistics in Medicine, 39(28): 4281-4300.
 DOI: 10.1002/sim.8725
- X. Cai and Q. Wang (2020). Educational tool and hands-on active-learning class activity for teaching agglomerative hierarchical clustering. *Journal of Statistics Education*, 28(3): 280-288. DOI: 10.1080/10691898.2020.1799727
- 15. Q. Wang (2020). Lindsay, Bruce G. Wiley StatsRef: Statistics Reference Online, DOI: 10.1002/9781118445112.stat08239.
- 16. Y. Dang* and Q. Wang (2019). Simultaneous variable and factor selections via sparse group lasso in factor analysis. *Journal of Statistical Computation and Simulation*, 89(14): 2744-2764.
- 17. Q. Wang and A. Z. Zambom (2019). Subsampling-extrapolation bandwidth selection in bivariate kernel density estimation. *Journal of Statistical Computation and Simulation*, 89(9): 1740-1759.
- 18. Q. Wang (2019). Extrapolation-based cross-validation bandwidth selectors: a review and comparative study with discussion on bivariate applications. *International Statistical Review*, 87(1): 127-151.
- 19. Q. Wang and L. M. Tabacu (2019). On distribution function estimation using log-odds interpolation, *Journal of Statistical Theory and Practice*, 13(42): 1-28.
- 20. Y. Wu * and Q. Wang (2019). Improving multi-label classification via heterogeneous ensemble methods, *Involve*, a journal of mathematics, 12(6):1035-1050.
- 21. Q. Wang and D. Zhao* (2019). Penalization with group-wise sparsity: econometric applications to eBay Motors online auctions. *Empirical Economics*, 57(2): 683-704.
- 22. Q. Wang and B. G. Lindsay (2017). Pseudo-kernel method in *U*-statistic variance estimation with large kernel size. *Statistica Sinica* 27(3): 1155-1174.
- 23. Q. Wang (2017). Extrapolation techniques in *U*-statistic variance estimation. Communications in Statistics—Theory and Methods, 46(17): 8387-8400.
- 24. J. Warner*, O. Dobromyrova*, D. Shay*, and Q. Wang (2017). Deeper pockets, deeper pleasure? *Significance* April issue: 34-37.
- 25. Q. Wang and B. G. Lindsay (2015). Improving cross-validated bandwidth selection using subsampling-extrapolation techniques. *Computational Statistics & Data Analysis*, 89: 51-71.

^{*:} student co-authors.

- 26. Q. Wang and S. Chen* (2015). A general class of linearly extrapolated variance estimators. Statistics & Probability Letters, 98: 29-38.
- 27. Q. Wang and B. G. Lindsay (2014). Variance estimation of a general *U*-statistic with application to cross-validation. *Statistica Sinica*, 24(3): 1117-1141.
- 28. V. Le* and Q. Wang (2014). Robust thresholding for Diffusion Index forecast. *Economics Letters*, 125: 52-56.

Invited Book Reviews:

- 29. Q. Wang (2025). Foundations of Data Science with Python: by John M. Shea. *The American Statistician*, 79(2), 286. DOI: 10.1080/00031305.2025.2458850
- 30. Q. Wang (2020). Multivariate Kernel Smoothing and Its Applications: by José E. Chacón and Tarn Duong. *Journal of the American Statistical Association*, 115(529): 486. DOI: 10.1080/01621459.2020.1721247

Other Publications:

- 31. Q. Wang (2015). Extrapolated variance estimators. 2015 Proceedings of the Joint Statistical Meetings, Section on Nonparametric Statistics, Alexandria, VA: American Statistical Association, 3532-3545.
- 32. Q. Wang (2012). Investigation of topics in *U*-statistics and their applications in risk estimation and cross-validation (Ph.D. dissertation). *Penn State University library electronic resource*, 1-187.
- 33. Q. Wang and B. G. Lindsay (2011). Topics in *U*-statistics and risk estimation. *2011 Proceedings of the Joint Statistical Meetings*, Section on Nonparametric Statistics, Alexandria, VA: American Statistical Association, 1267-1280.

Software development:

34. F. M. Jimenez* and Q. Wang (2022). "aucvar": a R package for variance estimation of AUC. DOI: 10.5281/zenodo.7071862

Work Submitted (not yet accepted):

35. Q. Wang and X. Cai (2025). Covariance matrix estimation of multivariate *U*-statistics with applications (under review after invited major revision).

Ongoing Projects

- A. Zambom and Q. Wang Project Title: Nonparametric testing and variable selection for ARCH-X model
- Q. Wang, Y. Zhao, and T. Zhang Project Title: Jackknife empirical likelihood for infinite-order *U*-statistics with applications to subsampling-based ensemble methods

Teaching Experience

Courses taught at Wellesley College

STAT 101 (Elementary Applied Statistics)

STAT 160 (Foundamentals of Statistics)

STAT 218** (Introductory Statistics and Data Analysis)

STAT/MATH 220 (Probability)

STAT 228** (Multivariate Data Analysis)

STAT 318** (Regression Analysis and Statistical Models)

DS 340H⁺ (Data Science Capstone)

MATH 360/370 (Senior Thesis)

Courses taught at Bentley University

STAT 625 (Quantitative Analysis for Business, graduate level)

Topics: ordinary linear regression and generalized linear regression

STAT 635 (Intermediate Statistical Modeling for Business, graduate level)

Topics: multivariate data analysis and selected topics in data mining

^{**:} courses that were proposed and developed by me.

^{+:} this course was co-proposed and designed by all data science faculty.

Courses taught at Williams College

STAT 101 (Elementary Statistics and Data Analysis)

STAT 201 (Statistics and Data Analysis)

STAT 341 (Bayesian Statistics)

STAT 346 (Regression and Forecasting)

STAT 462** (Modern Nonparametric Statistics)

STAT 014** (An Introduction to the Chinese Tea Culture)

Courses taught at Penn State

STAT 240 (Introduction to Biometry)

STAT 462 (Applied Regression Analysis)

Industry Experience

Full-time Intern

06/2011-08/2011

Personal Insurance Research and Development Program,

Travelers Insurance, Hartford, CT

Part-time Assistant

08/2005-07/2007

Scottish Development International, Beijing Representative Office, Beijing, China

Honors Theses Supervised

Department of Mathematics & Statistics, Wellesley College

Thesis advisor for the following honors theses:

- Leah Valentiner '26, Wellesley College
 Thesis title: "Simultaneous parameter-wise and group-wise regularization with
 overlapping groups"
- Maria Yokochi Ordal '25, Wellesley College
 Thesis title: "Investigating the role of diversity and alternative subsampling schemes
 on the prediction performance of subsampling-based ensemble methods"
- Ziyue (Cherith) Chen '24, Wellesley College
 Thesis tile: "An improved two-stage binary relevance method for multi-label classification"
- Yujie (Phyllis) Wei '21, Wellesley College
 Thesis title: "Quantifying variation of subsampling-based ensemble methods under a *U*-statistic framework".
- Alexandria Guo '19, Wellesley College
 Thesis title: "An unbiased variance estimation of a K-sample U-statistic with applications to AUC in binary classification".
- Yujue (Victoria) Wu '18, Wellesley College
 Thesis title: "Multi-label super learner: multi-label classification and improving
 its performance using heterogeneous ensemble methods".
- Yuanchu Dang '17 (highest honors), Williams College
 Thesis title: "Simultaneous variable and factor selections via sparse group lasso in
 factor analysis".

Thesis committee member or honors visitor for the following honors thesis:

- Gabriella Karcz '25, Wellesley College
 Thesis title: "The role of key courtship behaviors and female choice in promoting hybridization between introduced and endemic weevils (Coleoptera: Curculionidae) of the Galápagos Islands"
- Brooke Perreault '24, Wellesley College
 Thesis title: "Measuring and evaluating the localness of Google search results in
 the context of the 2022 US midterm elections"
- Yijie (Helen) Chen '23, Wellesley College
 Thesis title: "Blood glucose prediction for Type 1 diabetes: learning RNN-LSTM
 models using a real-world dataset"

- Cindy Zhao '22, Wellesley College
 Thesis title: "Accumulated discrimination in the legal field: evidence from young lawyers"
- Sarah Elizabeth Stockman '22, Wellesley College
 Thesis title: "Biodiversity, structure, and function: predicting changes in biomass with biodiversity and canopy structural metrics in disturbed NEON forests".
- Kelly Kung '17, Wellesley College
 Thesis title: "Analysis of the effects of first year advisors and first year mentors on a Wellesley student's choice of STEM vs. non STEM major".

Committee member for honors through examinations:

- Yijia (Helen) Chen '23, Wellesley College
- Haimei Zhang '19, Wellesley College
- Molly Hoch '18, Wellesley College
- Sharon Zhang '18, Wellesley College

Department of Mathematics & Statistics, Williams College

Thesis advisor for the following honors theses:

- Shiwen (Heidi) Chen '14, Williams College Thesis title: "Resampling methods with application to variance estimation".
- Vu Le '14 (highest honors), Williams College
 Thesis title: "Time-series forecasting using large number of predictors".

Thesis committee member for the following honors theses:

- Faraz Rahman '14 (highest honors), Williams College
 Thesis title: "Simultaneous inference on margins of correlated binary data".
- Victor Luo '14, Williams College Thesis title: "Relieving and readjusting pythagoras".
- Ben Seiler '13, Williams College
 Thesis title: "The forest through the trees in multilabel classification".

Other Research Supervision

Research Project
 Research Students: Marley DeSimone '24 and Amy Hu '25

 Topic: variable selection in high-dimensional mediation analysis
 This two-year project is supported by the Wellesley Science Center Brachman Hoffman Small Grants.

• Independent Study (data science capstone project) Student: Victoria Lu '24

• Development of R package "aucvar" Spring 2022 Research Student: Francisca Moya Jimenez '22, Wellesley College

Fall 2023

• Science Center HHMI Inclusive Excellence initiative Spring 2019
Project title: "Designing interactive statistical apps".
Research Students: Donna Gan '20 and Ying Ying Yang '22, Wellesley College

- Science Center Summer Research, Wellesley College Summer 2018 Project title: "Beyond least squares—robust regression analysis". Research students: Donna Gan '20 and Keran Huang '21, Wellesley College
- Science Center Summer Research, Wellesley College
 Project title: "Multilable classification and its applications".

 Research student: Victoria Wu '18, Wellesley College
- Faculty mentor for USPROC winning projects

 The Consortium for the Advancement of Undergraduate Statistics Education (CAUSE)

 and the American Statistical Association (ASA)

* Second place winning project for USCLAP

Fall 2024

Project title: Diagnosing Specific Language Impairment In Children

Students: Hsi Liu-Er '26 and Yildiz Derinkok '25

* Third place winning project for USCLAP

Fall 2024

Project title: "Community Factors On Violent Crime Rates"

Students: Nimo Mohamud '25 and Song Hoang '25

* Third place winning project for USCLAP

Fall 2023

Project title: "Risk Factors for College Drop-Out"

Students: Caroline Jung '25 and Tayea Rogers '25

* Honorable mention project for USCLAP

Spring 2023

Project title: "Music And Mind: Examining The Relationship Between Music Listening Behaviors And Self-Reported Mental Health"

Students: Maggie Hsu '24 and Vivian Ma '24

* First place winning project for USCLAP

Spring 2022

Project title: "Uncovering The Relationship Between Online News Characteristics And Popularity"

Students: Valerie Tseng '23 and Sinclaire Schuetze '23

* Honorable mention project for USCLAP

Spring 2022

Project title: "Male Fertility Analysis: Identifying Significant Variables And Predicting Fertility Outcomes"

Students: Huda Saeed '23 and Marisa Papagelis '22

* Third place winning project for USRESP

2019

Project title: "An Unbiased Variance Estimator of a K-sample U-statistic with Application to AUC in Binary Classification".

Students: Alexandria Guo '19, Wellesley College

* Honorable mention project for USCLAP

2019

Project title: "Comparison of four multi-label classification methods".

Students: Keran Huang '21 and Han Qiao '19, Wellesley College

* Second place winning project for USCLAP

2019

Project title: "Facebook or Fakebook: identifying fake Facebook accounts".

Students: Donna Gan '20 and Phyllis Wei '21, Wellesley College

* Third place winning project for USCLAP

2018

Project title: "Predictors for breast cancer recurrence".

Students: Yujue (Victoria) Wu '18 and Clara Sorensen '18, Wellesley College

* Honorable mention winning project for USCLAP

2018

Project title: "Central News Theorem: predicting online news popularity".

Students: Cynthia Chen '19 and Anna Caldwell-Overdier '19, Wellesley College

* First place winning project for USCLAP

2015

Project title: "Predictors for winning in men's professional tennis".

Students: Matthew Quinn '17 and Stephanie Stacy '17, Williams College

Student Research Tanner Conference, Wellesley College Talks Supervised

• Marley DeSimone '24

Title: "Exploring public health through biostatistics"

• Andrea Tang '28

Title: "Cancer type prediction using machine learning classifiers and patient gene expression"

Ruhlman Conference, Wellesley College

USCLAP: Undergraduate Statistics Class Project Competition. USRESP: Undergraduate Statistics Research Project Competition • Maria Ordal '25

Title: "Effects of diversity on accuracy of subsampling-based ensemble predictions"

• Ziyue (Cherith) Chen '24

Title: "An improved two-stage binary relevance algorithm for multilabel classification"

• Veeksha Mandu '22

Title: "Trends in cost of childcare in Washington state"

• Yujie (Victoria) Wu '18

Title: "Multi-label super learner"

Department of Mathematics & Statistics, Wellesley College

• Yujie (Victoria) Wu '18

Title: "Support vector machine and its applications".

Department of Mathematics & Statistics, Williams College

• Ivan Rybkin '15

Topic: "Error propagation law".

• Phonkrit Tanavisarut '15

Topic: "Stretching the fishing net with penalization".

• Nathan McCue '15

Topic: "Smoothing splines".

• Alexander Nanda '15

Topic: "Linear discriminant analysis".

• Ally Ensor '14

Topic: "Deming regression".

• Catherine Gerkis '14

Topic: "Penalized regression: ridge and lasso".

Invited Presentations or Panel discussions

"Assessing the prediction performance of subsampling-based ensemble methods." The 11th International Forum on Statistics, Renmin University, Beijing, China 07/2025

"Jackknife empirical likelihood for infinite-order U-statistics with applications" Department of Mathematics and Statistics Colloquium 04/2025 University of New Hampshire, NH, USA

"An improved two-stage binary relevance method for multilabel classification"
Guest lecture of STAT 355 (Multivariate Statistical Analysis)
10/2024
Williams College, MA, USA

 $"Jackknife\ empirical\ likelihood\ for\ assessing\ variability\ of\ infinite-order\ U-statistics\ with\ applications\ to\ ensemble\ methods"$

Special session on "Innovative statistical learning methods for complex data"
7th International Conference on Econometrics and Statistics, Beijing, China 07/2024

"Active-Learning Class Activities and Shiny Applications for Teaching Support Vector Classifiers"

Journal of Statistics and Data Science Education/CAUSE Webinar Series 03/2024

"Jackknife empirical likelihood for quantifying variability of infinite-order U-statistics" IMS International Conference on Statistics and Data Science, Lisbon, Portugal 12/2023

"An efficient variance estimator for cross-validation under partition-sampling"
6th International Conference on Econometrics and Statistics, Tokyo, Japan 08/2023

"Quantifying	uncertainty	of	subsampling-	base	d ensemble n	nethods"
International	Conference:	$_{ m in}$	Mathematics	and	Application	s, Thailand

12/2022

"Variable selection for mediation analysis with latent factors via group-wise penalization" Special session on "Recent Development in Mediation Analysis" 15th International Conference on Computational and Methodological Statistics 12/2022 London, United Kingdom

"Quantifying uncertainty of subsampling-based ensemble methods"
Brunel Mathematics Doctoral Researchers' Symposium (guest speaker)
Department of Mathematics, Brunel University London, England

06/2022

"Assessing variation of subsampling-based ensemble methods" Department of Mathematics and Statistics, Connecticut College

10/2021

"An efficient variance estimator of AUC and its applications to binary classification" (virtual presentation)

International Conference in Mathematics and Applications, Thailand

12/2020

"An efficient variance estimator of AUC and its applications to binary classification" Department of Mathematics and Statistics Colloquium 10/2020 University of North Carolina-Greensboro, NC, USA

"Subsampling-extrapolation bandwidth selection in bivariate kernel density estimation"
Statistics and Probability Seminar, UMass Amherst, MA, USA 03/2020

"Improving multilabel classification via heterogeneous ensemble methods"
Department of Mathematics and Statistics Colloquium
Vassar College, NY, USA

02/2020

11/2019

"Subsampling-extrapolation bandwidth selection in bivariate kernel density estimation" 12th International Conference on Computational and Methodological Statistics 12/2019 London, United Kingdom

 $"Panel discussion: Intro \ Stat \ Course-Then \ and \ Now: \ How \ has \ our \ introductory \ statistics \ course \ changed/should \ change?"$

The 24th New England Isolated Statistician Meetings, Wellesley, MA

"Subsampling-extrapolation bandwidth selection in bivariate kernel density estimation"
Faculty seminar, Department of Statistics 08/2019
Capital Normal University, Beijing, China

"Simultaneous variable and factor selections via sparse group lasso in factor analysis"
Faculty seminar, School of Statistics and Management 07/2019
Shanghai University of Finance and Economics, Shanghai, China

"Panel discussion: software in statistics courses"
The 23rd New England Isolated Statistician Meetings, Wellesley, MA

10/2018

07/2018

"Pseudo-kernel method in assessing the variation of cross-validated risk" 2018 ICSA China Conference, Qingdao, China

"Panel discussion: Nonprofit organizations, Pharmaceutical, and IT industry" Conference for the 50th anniversary of the Penn State Statistics Department $\,$ 05/2018 State College, PA

"Penalization with group-wise sparsity with application to eBay Motors online auction" 2016 Analytics without Boarders conference, Waltham, MA 04/2016

"Assessing the precision of an unbiased estimator" Department of Mathematics, Wellesley College	02/2016	
"Finding the best model using a U model selection tool" Department of Mathematical Sciences, Bentley University	01/2015	
"An improved method in bagging cross-validation with second-order extrapolation" Department of Statistics, School of Mathematical Sciences, Beijing Normal Universi Beijing, China $06/20$		
"How does the eruption time of the Old Faithful geyser vary?" Department of Mathematics and Statistics, Colby College	10/2013	
"Subsampling and extrapolation techniques in kernel density estimation" The 2nd Taihu International Statistics Forum, Suzhou, China	07/2013	
"Cross-validation and a U model selection tool" The 4th IMS-China International Conference, Chengdu, China	07/2013	
"Topics in U-statistics and risk estimation" Department of Statistics and Probability, Michigan State University Department of Mathematics and Statistics, Austin Peay State University Department of Mathematics and Statistics, Williams College Department of Natural Sciences, University of Wisconsin 2011 Joint Statistical Meetings, Section on Nonparametric Statistics	02/2012 02/2012 01/2012 12/2011 08/2011	

Conference Presentations

Oral Presentations:

"Jackknife empirical likelihood for quantifying variability of infinite-order U-statistics" IMS International Conference on Statistics and Data Science 12/2023 Lisbon, Portugal

"Online repository for facilitating teaching and learning of statistical modeling courses" 9th International Conference of Higher Education Advances 06/2023 Valencia, Spain

"Quantifying uncertainty of subsampling-based ensemble methods under a U-statistic framework" (virtual presentation) 14th International Conference on Computational and Methodological Statistics 12/2021

London, United Kingdom

"Pseudo-kernel method in assessing cross-validated risk" The 2018 Joint Statistical Meetings (Vancouver, Canada)

"Extrapolation techniques in U-statistic variance estimation" The 2015 Joint Statistical Meetings (Seattle, WA)

"A class of linearly extrapolated variance estimators" * The 2014 Joint Statistical Meetings (Boston, MA)

"Time-series forecasting with large number of predictors"* The 2014 Joint Statistical Meetings (Boston, MA)

The 2014 Joint Statistical Meetings (Boston, MA)

"Two-stage subsampling-extrapolation techniques in bandwidth selection"

^{*:} student presentation.

The 2013 Joint Statistical Meetings (Montreal, Canada)

"Cross-validation and a U-statistic model selection tool" The 2013 ENAR Spring Meetings (Orlando, FL)

"Cross-validation and BIC in model selection" The 2012 Joint Statistical Meetings (San Diego, CA)

Poster Presentations:

"Improving the performance of cross-validation in kernel density estimation"
The 2014 Women in Statistics Conference (Raleigh-Durham/Research Triangle, NC)

"Topics in U-statistics and risk estimation" The 2011 ENAR Spring Meetings (Miami, FL) The 2011 Joint Statistical Meetings (Miami Beach, FL)

- The third place winning class project

- The third place winning class project

- Honorable mention winning class project

- Honorable mention winning class project

- The third place winning research project

- The second place winning class project

- The first place and honorable mention winning class projects

- The third place & honorable mention winning class projects

"Topics in U-statistics and risk estimation"
The 2011 Rao Prize Conference (Penn State-University Park, PA)

"The unbiased estimator of the variance of a U-statistic and its resampling realization" Conference on Resampling and High-Dimensional Data (Texas A&M, TX)

Honors&Awards

• Faculty Awards (travel grant)	2024
• Faculty Awards (summer research)	2024
• Educational Research & Development grant, Wellesley College	2024
• Brachman Hoffman Small Grant, Wellesley College	2022-2024
• Faculty Awards (travel grant)	2023
• Faculty Awards (summer research)	2023
• Education Research & Development grant (pedagogical travel grant)	2023
• Faculty Awards (summer research)	2022
• The BOW Presidential Innovation Grant	2020
• Brachman Hoffman Small Grant, Wellesley College	2020
• Educational Research & Development grant, Wellesley College	2020
• Faculty Awards (travel grant), Wellesley College	2019
• Educational Research & Development grant, Wellesley College	2019
• Faculty Awards (travel grant), Wellesley College	2018
• Educational Research & Development grant, Wellesley College	2018
• Faculty mentor for the winning projects of USPROC The Consortium for the Advancement of Undergraduate Statistics Edu and the American Statistical Association USCLAP competition (intermediate statistics)	ıcation
 The second place winning class project 	Fall 2024

Fall 2024

Fall 2023

Spring 2023

Spring 2022

Fall 2019

Fall 2019

Fall 2018

Spring 2019

	 The first place winning class project 	Spring 2015	
	• Junior Researcher Travel Awards, ASA Women in Statistics Comm	nittee 2014	
	• Winner of 2011 ASA Nonparametric Session Student Paper Competition		
	• Outstanding undergraduate (highest honors), Beijing Normal University		
	• Outstanding teaching intern, Beijing Normal University (intern at Beijing No.4 High School)	versity 2007 2006	
	• University academic fellowships, Beijing Normal University	2003-2007	
Journal	• Journal of Statistical Computation and Simulation	2024, 2025	
Refereeing	• Computational Statistics & Data Analysis	2024, 2025	
	• International Journal of Biostatistics	2024	
	• Electronic Journal of Statistics	2023, 2024	
	• Journal of Statistics and Data Science Education	2023, 2024	
	• Stat	2023	
	• IEEE Signal Processing Letters	2023	
	• Journal of Scientific Computing	2022, 2023	
	• The American Statistician	2018, 2023	
	• Journal of Machine Learning Research	2022	
	• Journal of the American Statistical Association	2020-2022	
	• Statistics	2018, 2022	
	• Annals of Statistics	2020	
	• Journal of Statistical Computation and Simulation	2020	
	• Journal of Statistical Planning and Interface	2018-2020	
	• Statistica Sinica	2017	
	• Canadian Journal of Statistics	2016	
	• Journal of Statistical Theory and Practice	2015	
	• Hacettepe Journal of Mathematics and Statistics	2015	
	• Journal of Statistics Education	2014	
Invited Reviewer	• Book reviewer for a data science textbook Publisher: Chapman & Hall/CRC Press	2024	
	• Book reviewer for a probability textbook Publisher: Taylor & Francis Group	2022	
	• Grant reviewer for Swiss National Science Foundation	2019, 2020	
	• Mathematical Reviews (8+ articles)	2017-present	
	• Book reviewer for a statistics textbook Publisher: CRC Press, Taylor & Francis Group.	2017	

College and Departmental Service

Professional Service

Wellesley College • International first-year mentor	2025-2026
Fall academic fair	2023-2025
• Statistics visitor hiring committee, mathematics department	Fall 2024
Committee member	1'an 2024
Career Education Advisory committee	2024-2027
• Math department faculty colloquium organizer	2024-2025
• Committee member Department administrative assistant hiring committee	2023
• Committee member Advisory Committee on Minority Recruiting, Hiring, and Retention	2021-2023
Tutor and grader coordinator, mathematics department	2021-2022
• First-year advisor	2021-2022
• Committee member, statistics hiring committee	2021
Advisor of data science major	2019-present
• Committee member, mathematics hiring committee	2018-2019
• First-year advisor	2018-2019
• Committee member	
Advisory Committee on Minority Recruiting, Hiring, and Retention	2017-2019
• Committee member, Interdisciplinary Committee for Data Science	2016-2018
• Fall colloquium organizer, mathematics department	2017-2018
Bentley University	
• Committee member, statistics hiring committee	2015-2016
• Advisor of Liberal Studies major	2015-2016
Williams College	
• Committee member, Diversity and Community Committee	2014-2015
• Fall colloquium organizer, Math&Stat department	2014-2015
• Committee member, Olmsted Committee	2013-2014
• Winter Study colloquium organizer, Math&Stat department	2013-2014
• Committee member, Science Executive Committee	2013-2014
• First-year advisor	2013-2015
• Committee member, statistics hiring committee	2012-2013
• Actuarial advising	2012-2013
 Organizer, Invited Session on Recent Advances in Nonparametric Es Inference, 2025 ICSA China Conference Location: Zhuhai, China 	timation and 2025
 Co-organizer, Student Research Symposium on Statistics and Data S Sponsored by the Boston Chapter of American Statistical Associatio Location: Boston University, MA 	
 Organizer, Special Session on Recent Advances on Jackknife Empiric 6th International Conference on Computational and Methodologic Berlin, Germany 	
• Co-organizer, ASA BOW DataFest BOW (Babson College, Olin College, and Wellesley College)	2023

• Organizer, Special Session on Statistics and Data Science Curriul matics Department	
2023 Joint Mathematics Meetings, Boston, MA	2023
 Co-organizer, Student Research Symposium on Statistics and Dat Sponsored by the Boston Chapter of American Statistical Associa Location: Boston University, MA 	
• Co-organizer and host, ASA BOW DataFest BOW (Babson College, Olin College, and Wellesley College)	2020
• Committee member, Statistics Education Committee Boston Chapter of American Statistical Association (BCASA)	2018-present
• Co-organizer and host The 23rd and 24th New England Isolated Statisticians Meeting	2018, 2019
• Co-organizer, ASA BOW DataFest BOW (Babson College, Olin College, and Wellesley College)	2017-2018
• Institutional liaison for StatFest	2018
• AMS committee representative American Mathematical Society, AMS-ASA-MAA-SIAM Joint Da	2017-2020 ata Committee
• Judge for the Undergraduate Class Project Competition Consortium for the Advancement of Undergraduate Statistics Edu American Statistical Association	2016 acation
• Judge for Five-College DataFest Competition, UMass Amherst	2015
• Docent, 2014 Joint Statistical Meetings	2014
• Volunteer, Women in Statistics Conference	2014

Affiliations

- International Chinese Statistical Association
- Institute of Mathematical Statistics