

Contact Information

Department of Mathematics
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Education

2003 B.S. Mathematics Peking University, China
2009 Ph.D. Mathematics Stony Brook University, U.S.A.

Current Employment

2025–present Professor Department of Mathematics, the University of Arizona
2010–present Member GIDP in Statistics and Data Science, the University of Arizona

Previous Employment

2009–2010 Research Associate Statistics Lab, Department of ORFE, Princeton University
2010–2013 Visiting Assistant Professor Department of Mathematics, the University of Arizona
2013–2019 Assistant Professor Department of Mathematics, the University of Arizona
2019–2025 Associate Professor Department of Mathematics, the University of Arizona

Publications**Refereed Journal Articles**

1. Fan, J., Guo, S., and Hao, N. (2012) Variance Estimation Using Refitted Cross-Validation in Ultrahigh Dimensional Regression, *Journal of the Royal Statistical Society: Series B*, **74**, Part 1, pp. 37-65.
2. Hao, N., Niu, Y.S., and Zhang, H. (2013) Multiple Change-Point Detection via a Screening and Ranking Algorithm, *Statistica Sinica*, **23**, pp. 1553-1572.
3. Hao, N., and Zhang, H.H. (2014) Interaction Screening for Ultra-High Dimensional Data, *Journal of the American Statistical Association*, **109**, pp. 1285-1301.
4. Hao, N., Dong, B., and Fan, J., (2015) Sparsifying the Fisher Linear Discriminant by Rotation, *Journal of the Royal Statistical Society: Series B*, **77**, Part 4, pp. 827-851.
5. Niu, Y.S., Hao, N., and Zhang, H. (2016) Multiple Change-point Detection: a Selective Overview, *Statistical Science*, **31**, pp. 611-623.
6. Hao, N., and Zhang, H.H. (2017) A Note on High Dimensional Linear Regression with Interactions, *The American Statistician*, **71**, Issue 4, pp. 291-297.
7. Hao, N., and Zhang, H.H. (2017) Oracle P-values and Variable Screening, *Electronic Journal of Statistics*, **11**, pp. 3251-3271.
8. Xiao, F., Niu, Y.S., Hao, N., Xu, Y., Jin, Z., and Zhang, H. (2017) modSaRa: a computationally efficient R package for CNV identification, *Bioinformatics*, **33**, Issue 15, pp. 2384-2385.
9. Niu, Y.S., Hao, N., and Dong B. (2018) A New Reduced-Rank Linear Discriminant Analysis Method and Its Applications, *Statistica Sinica*, **28**, pp. 189-202.
10. Niu, Y.S., Hao, N., and Zhang, H.H. (2018) Interaction Screening by Partial Correlation, *Statistics and Its Interface*, **11**, pp. 317-325.
11. Hao, N., Feng, Y., and Zhang, H.H. (2018) Model Selection for High Dimensional Quadratic Regressions via Regularization, *Journal of the American Statistical Association*, **113**, pp. 615-625.

12. Xiao, F., Luo, X., Hao, N., Niu, Y.S., Xiao, X., Cai, G., Amos, C.I., and Zhang, H. (2019) An Accurate and Powerful Method for Copy Number Variation Detection, *Bioinformatics*, **35(17)**, pp. 2891-2898.
13. Shin, S.J., Wu, Y., and Hao, N. (2020) A Backward Procedure for Change-point Detection with Application to Copy Number Variation Detection. *The Canadian Journal of Statistics*, **48**, pp. 366-385.
14. Hao, N., Niu, Y.S., Xiao, F., and Zhang, H. (2021) A Super Scalable Algorithm for Short Segment Detection. *Statistics in Biosciences*, **13**, pp. 18-33.
15. Wu, R., and Hao, N. (2022) Quadratic Discriminant Analysis by Projection. *Journal of Multivariate Analysis*, **190**, 104987.
16. Hao, N., Niu, Y.S., and Xiao, H. (2023) Equivariant Variance Estimation for Multiple Change-point Model. *Electronic Journal of Statistics*, **17**, pp. 3811-3853.
17. Lu, Z., Hao, N., and Zhang, H.H. (2024) Simultaneous Change-point Detection and Curve Estimation. *Statistics and Its Interface*, **17**, pp. 493-500.
18. Zhao, Y., Hao, N., and Zhu, J. (2024) Variational Estimators of the Degree-corrected Latent Block Model for Bipartite Networks. *Journal of Machine Learning Research*, **25**, 150, pp. 1-42.
19. Wang, Z., Fang, Y., Liu, Z., Hao, N., Zhang, H.H., Sun, X., Que, J., and Ding, H. (2024) Adapting Nanopore Sequencing Basecalling Models for Modification Detection via Incremental Learning and Anomaly Detection. *Nature Communications*, **15**, 7148.
20. Wang, Z., Liu, Z., Fang, Y., Zhang, H.H., Sun, X., Hao, N., Que, J., and Ding, H., (2025) Training Data Diversity Enhances the Basecalling of Novel RNA Modification-Induced Nanopore Sequencing Readouts. *Nature Communications*, **16**, 679.
21. Park, J., Zhao, Y., and Hao, N. (2025) A Note on the Identifiability of Degree-Corrected Stochastic Block Model. *Stat*, **14**, e70067.
22. Wang, Z., Tu, M., Liu, Z., Wang, K.K., Fang, Y., Hao, N., Zhang, H.H., Que, J., Sun, X., Yu, A., and Ding, H. (2025) A Reference-Guided Iterative Approach to Polish the Nanopore Sequencing Basecalling for Therapeutic RNA Quality Control. *Communications Biology*, **8**, 1406.
23. Ouyang, W., Wu, R., Hao, N., and Zhang, H.H. (2025) Dynamic Supervised Principal Component Analysis for Classification. *Journal of Computational and Graphical Statistics*, **34**, pp. 1446-1455.
24. Li, X., Zhao, Y., Pan, Q., and Hao, N. (2025+) Community Detection with Heterogeneous Block Covariance Model. *Journal of Computational and Graphical Statistics*, to appear.

Refereed Conference Articles

25. Niu, Y.S., Hao, N. and An, L. (2011) Detection of Rare Functional Variants Using Group ISIS, *BMC Proceedings*, **5(Suppl 9):S108**.
26. Dong, B. and Hao, N. (2015) Semi-supervised High Dimensional Clustering by Tight Wavelet Frames, *SPIE Optical Engineering+ Applications*.

Scientific Products/Software

27. Hao, N., Niu, Y.S., and Zhang, H. (2013) R Package `SaRa`.
28. Xiao, F., Niu, Y.S., Hao, N., Xu, Y., Jin, Z., and Zhang, H. (2017) R Package `modSaRa`.
29. Niu, Y.S., Hao, N., and Dong B. (2018) R Package `SPCALDA`.
30. Feng, Y., Hao, N., and Zhang, H.H. (2018) R Package `RAMP`.
31. Xiao, F., Luo, X., Hao, N., Niu, Y.S., Xiao, X., Cai, G., Amos, C.I., and Zhang, H. (2019) R Package `modSaRa2`.
32. Shin, S.J., Wu, Y., and Hao, N. (2020) R Package `bwd`.
33. Hao, N., Niu, Y.S., Xiao, F. and Zhang, H. (2021) R Package `SSSS`.
34. Lu, Z., Hao, N., and Zhang, H.H. (2023) R Package `SCHACE`.

35. Ouyang, W., Wu, R., Hao, N., and Zhang, H.H. (2024) R Package DSPCA.
36. Li, X., Zhao, Y., Pan, Q., and Hao, N. (2024) R Package hbcm.
37. Liu, Z., Hao, N., Niu, Y.S., and Xiao, H. (2025) R Package EVE.
38. Liu, Z., Hao, N., Niu, Y.S., Xiao, H. and Ding, H. (2025) R Package SIP.

Manuscripts under Review

39. Zeng, J., Zhang, X., and Hao, N., (2024+) Second-order Sparse Sufficient Dimension Reduction with Applications to Quadratic Discriminant Analysis. Major Revision invited by *Journal of the American Statistical Association*.
40. Liao, S., Sun, X., Hao, N. and Zhang, H.H. (2025+) Interpretable Scalar-on-Image Linear Regression Model via Generalized Dantzig Selector. Major Revision invited by *Journal of the American Statistical Association*.
41. Liu, Z., Hao, N., Niu, Y.S., Xiao, H. and Ding, H. (2025+) Autocorrelation Test under Frequent Mean Shifts. Under review.
42. Mo, X., Wu, R., Xiao, H., Niu, Y.S., and Hao, N. (2025+) Solution Path for a Shifted Maximum Subarray Problem. Under review.
43. Park, J., Hao, N., Niu, Y.S., and Hu, M. (2025+) Kernel Density Balancing. Under review.

Awarded Grants

1. Simons Foundation: AMS Simons Travel Grant 2012-2014
Total Awarded: \$4,000
Role: PI
2. National Science Foundation: DMS-1309507 2013-2017
“Flexible modeling for high-dimensional complex data: theory, methodology, and computation”
Total Awarded: \$150,000. PI: Hao Zhang.
Role: Co-PI
3. National Science Foundation (NSF) Grant: DMS-1722691 2017-2021
“Collaborative research: scalable and flexible algorithms to detect structural change in complex sequence data”
Total Awarded: \$379,732; the University of Arizona portion: \$165,996. PI: Yue Niu.
Role: Co-PI
4. Simons Foundation: Collaboration Grants for Mathematicians 524432 2017-2022
“Scalable methods in high dimensional statistical learning”
Total Awarded: \$42,000.
Role: PI
5. National Science Foundation (NSF) Grant: DMS-1937229 2020-2025
“RTG: Applied Mathematics and Statistics for Data-Driven Discovery”
Total Awarded: \$1,252,358. PI: Kevin Lin.
Role: SP
6. National Science Foundation (NSF) Grant: 2245381 2023-2026
“Collaborative Research: CDS&E-MSS: Community detection via covariance structures”
Total Awarded: \$220,000; the University of Arizona portion: \$40,000.
Role: PI

Service

- Editorial Board
 - 2019–2022 Associate Editor Stat
 - 2020– Editorial board of reviewers Journal of Machine Learning Research
 - 2022– Editor Stat
 - 2023– Associate Editor Journal of the American Statistical Association
- Professional Society Services
 - 2019 National Science Foundation: Panelist.
 - 2019–2021 Member, Award committee, International Chinese Statistical Association.
 - 2022–2023 Member, Advisory Board, the American Statistical Association, Arizona Chapter.
 - 2022–2026 Member, ASA-SLDS Student Paper Award Committee.
 - 2024 Member, WNAR Student Paper Competition Committee.
 - 2024 External Reviewer for Promotion.
- Conference Organizational Activities
 - 2010 Session Chair Joint Statistical Meetings, Vancouver, Canada.
 - 2015 Session Organizer ICSA China Statistics Conference, Shanghai, China.
 - 2016 Session Organizer&Chair The 10th ICSA International Conference, Shanghai, China.
 - 2018 Session Organizer&Chair TRIPODS Southwest Summer Conference, Biosphere 2, AZ.
 - 2018 Session Organizer ICSA Applied Statistics Symposium, New Brunswick, NJ.
 - 2018 Session Organizer Joint Statistical Meetings, Vancouver, Canada.
 - 2019 Session Chair International Conference on Frontiers of Data Science, Hangzhou, China.
 - 2019 Session Organizer&Chair ICSA China Statistics Conference, Tianjin, China.
 - 2021 Session Organizer&Chair WNAR 2021 Conference, Virtual.
 - 2023 Session Organizer&Chair Joint Statistical Meetings, Toronto, Canada.
 - 2024 Session Organizer&Chair WNAR 2024 Conference, Fort Collins, Colorado.
- Referee service: Annals of Statistics; Journal of the American Statistical Association; Journal of the Royal Statistical Society: Series B; Biometrika; Biometrics; Bernoulli; Journal of Computational and Graphical Statistics; Journal of Machine Learning Research; Journal of Econometrics; Journal of Business and Economic Statistics; Information and Inference; Journal of Multivariate Analysis; Statistica Sinica; Technometrics; Test; Electronic Journal of Statistics; Statistics in Medicine; Journal of the Royal Statistical Society: Series C; Statistics and its Interface; Statistics & Probability Letters; Computational Statistics and Data Analysis; Statistical Analysis & Data Mining; Physica A; Stat; Metrika; Communication in Statistics; Computational Statistics; Journal of Applied Statistics; Genetic Epidemiology; Nucleic Acids Research; Ecography; Frontiers in Statistical Genetics and Methodology; Earth and Space Science; Journal of Probability and Statistics.
- Departmental committees
 - 2013–2015 Member, Graduate Admissions Committee, GIDP in Statistics
 - 2014 Member, Progress Report Committee, GIDP in Statistics
 - 2015–2016 Member, Academic Program Review Self-Study Committee, GIDP in Statistics
 - 2017–2018 Member, Undergraduate Committee, Department of Mathematics
 - 2017–2018 Member, Planning Committee, Department of Mathematics
 - 2017–2020 Co-leader, Research Working Group 6, UA TRIPODS
 - 2018–2019 Member, Graduate Committee, Department of Mathematics
 - 2020–2022 Member, Computer Committee, Department of Mathematics
 - 2020–2022 Member, Personnel Committee, Department of Mathematics
 - 2021 Member, Graduate Admissions Committee, GIDP in Statistics and Data Science
 - 2021–2027 Member, Executive Committee, GIDP in Statistics and Data Science
 - 2021–2026 Organizer, Statistics and Data Science Colloquium
 - 2022–2024 Member, Graduate Committee, Department of Mathematics
 - 2023–2024 Member, ad-hoc Hiring Committee (Career-Track), Department of Mathematics
 - 2025– Member, Qualifying Exam Committee, GIDP in Statistics and Data Science

Outreach

- K-12 Education
 - 2019–2020 Coach, Math club, Sunrise Drive Elementary School (SDES), Tucson, AZ.
 - 2020–2021 Coach, Math club, Catalina Foothills School District, Tucson, AZ.
 - 2019–2025 Coach, SDES Team for mathleague.org Competition.
 - 2025–2026 Coach, MATHCOUNTS club, Orange Grove Middle School, Tucson, AZ.

Conferences/Scholarly Presentations

Colloquia and Seminars

1. “Multiple Change-Point Detection via a Screening and Ranking Algorithm”, Statistics GIDP Colloquium, the University of Arizona, Tucson, AZ, Mar. 2012
2. “An Introduction to High Dimensional Statistical Learning”, Sichuan University, Chengdu, Sichuan, China, Jul. 2012
3. “Selection of Interaction Effects for Ultra-High Dimensional Data”, Colloquium, Southwestern University of Finance and Economics, Chengdu, Sichuan, China, Jul. 2012
4. “Identify Interactions for Ultra-High Dimensional Data”, Colloquium, Department of Statistics & Biostatistics, Rutgers University, Piscataway, NJ, Nov. 2012
5. “Equivariant Estimators in High Dimensional Models”, Modeling and Computation Seminar, Department of Mathematics, the University of Arizona, Tucson, AZ, Nov. 2012
6. “Identify Interactions for High Dimensional Data”, Colloquium, Department of Mathematics, Tulane University, New Orleans, LA, Jan. 2013
7. “Identify Interactions for High Dimensional Data”, Seminar, Department of Statistics, Chinese University of Hong Kong, Hong Kong, Feb. 2013
8. “Identify Interactions for High Dimensional Data”, Seminar, Department of Management Sciences, City University of Hong Kong, Hong Kong, Feb. 2013
9. “Identify Interactions for High Dimensional Data”, Statistics Seminar, Department of Mathematical Sciences, New Jersey Institute of Technology, Newark, NJ, Feb. 2013
10. “Identify Interactions for High Dimensional Data”, Colloquium, School of Mathematical and Statistical Sciences, Arizona State University, Tempe, AZ, Feb. 2013
11. “Identify Interactions for High Dimensional Data”, Colloquium, Department of Mathematics, the University of Arizona, Tucson, AZ, Feb. 2013
12. “A Rotational Approach to High Dimensional Classification”, Seminar, Institute of Applied Mathematics, AMSS, CAS, Beijing, China, Jun. 2013
13. “A Rotational Approach to High Dimensional Classification”, Seminar, Center for Statistical Science, Peking University, Beijing, China, Jun. 2013
14. “Reduced-Rank Linear Discriminant Analysis”, Biostatistics Seminar, Yale School of Public Health, New Haven, Aug. 2015
15. “Recent Developments on Multiple Change-point Detection”, Seminar, School of Economics, Shanghai University of Finance and Economics, Shanghai, China, Dec. 2016
16. “Model Selection for High Dimensional Quadratic Regression Models”, Statistics Colloquium, Center for Statistical Science, Tsinghua University, Beijing, China, Dec. 2016
17. “Recent Developments on Multiple Change-point Detection”, Seminar, Institute of Statistics and Big Data, Renmin University of China, Beijing, China, Jan. 2017
18. “Simultaneous Inference for Multiple Change points”, Statistics Seminar, School of Mathematical and Statistical Sciences, Arizona State University, Tempe, AZ, Oct. 2017
19. “Overview of Statistical Dimension Reduction Techniques”, UA TRIPODS Seminar, the University of Arizona, Tucson, AZ, Nov. 2017

20. "An Introduction to Statistical Research", Research Tutorial Groups Seminar, Department of Mathematics, the University of Arizona, Tucson, AZ, Mar. 2018
21. "A Super Scalable Algorithm for Short Segment Detection", Statistics Colloquium, the University of Arizona, Tucson, AZ, Oct. 2018
22. "Geometry of Intervals", Undergraduate Research Seminar, the University of Arizona, Tucson, AZ, Nov. 2018
23. "A Super Scalable Algorithm for Short Segment Detection", Seminar, Chinese Academy of Sciences, Beijing, China, Jun. 2019
24. "Variance Estimation for Complex models", MNS Seminar at New College, Arizona State University West, Phoenix, Sep. 2019
25. "Equivariant Variance estimation for multiple change-point model", Statistics and Data Science Seminar, University of Illinois at Chicago, Oct. 2019
26. "Introduction to Statistical Research", Research Tutorial Groups Seminar, Department of Mathematics, the University of Arizona, Tucson, AZ, Mar. 2022
27. "Solution path for a shifted maximum subarray problem", Research Tutorial Groups Seminar, Department of Mathematics, the University of Arizona, Tucson, AZ, Apr. 2024
28. "Covariance Estimation and Inference for Time Series Data with Mean Shifts", Biostatistics Seminar, Department of Biostatistics, New York University, Sep. 2024
29. "Covariance Estimation and Inference for Time Series Data with Mean Shifts", Colloquium, Department of Mathematics and Statistics, UNC Charlotte, Sep. 2024

Invited Talks in Conferences and Symposia

30. "Variance Estimation Using Refitted Cross-Validation in Ultrahigh Dimensional Regression", 2010 Joint Statistical Meetings, Vancouver, Canada, Aug. 2010
31. "The Screening and Ranking Algorithm to Detect DNA Copy Number Variations", ICSA 2011 Applied Statistics Symposium, New York City, NY, Jun. 2011
32. "Selection of Interaction Effects for Ultra-High Dimensional Data", Conference on Statistical Learning and Data Mining, University of Michigan, Ann Arbor, MI, Jun. 2012
33. "An FDR Approach for Multiple Change-Point Detection", ENAR 2013 Spring Meeting, Orlando, FL, Mar. 2013
34. "Identify Interactions for High Dimensional Data", IMS-China International Conference on Statistics and Probability, Chengdu, Sichuan, China, Jul. 2013
35. "Statistical Methods for Detection and Analysis of Copy Number Variations", The 59th World Statistics Congress, Hong Kong, China, Aug. 2013
36. "New Methods for Interaction Selection", 2014 ICSA and KISS Joint Applied Statistics Symposium, Portland, Oregon, Jun. 2014
37. "A Rotate-and-Solve Procedure for High Dimensional Classification", Conference on Statistical Learning and Data Science, University of North Carolina at Chapel Hill, NC, Jun. 2016
38. "A Rotate-and-Solve Procedure for High Dimensional Classification", 2016 ICSA Applied Statistics Symposium, Atlanta, GA, Jun. 2016
39. "False Discovery Rate Control for Multiple Change-point Detection", The 10th ICSA international conference, Shanghai, China, Dec. 2016
40. "Simultaneous Inference for Multiple Change points", 2017 ICSA Applied Statistics Symposium, Chicago, IL, Jun. 2017
41. "Dimension Reduction via Quadratic Discriminant Analysis", 2018 ICSA China Conference with the Focus on Data Science, Qingdao, China, Jul. 2018

42. “Model Selection for High Dimensional Quadratic Regression Models”, MJU First International workshop on data science, Fuzhou, China, Jul. 2018
43. “Oracle P-values and Variable Screening”, 2019 Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China, May 2019
44. “A Backward Procedure for Change-point Detection with Applications to Copy Number Variation Detection”, 2019 ICSA China Conference, Tianjin, China, Jul. 2019
45. “A Super Scalable Algorithm for Short Segment Detection”, Machine Learning Day at Arizona State University, Apr. 2020 (canceled due to COVID)
46. “Quadratic Discriminant Analysis by Projection”, 2020 ICSA China Conference, Wuhan, China, Jul. 2020 (canceled due to COVID)
47. “Quadratic Discriminant Analysis by Projection”, EcoSta 2020, Seoul, Korea, Jul. 2020 (canceled due to COVID)
48. “Equivariant Variance Estimation for Multiple Change-point Model”, 2021 ICSA China Conference, Xi’an, China, Jul. 2021 (canceled due to COVID)
49. “Equivariant Variance Estimation for Multiple Change-point Model”, 10th World Congress in Probability and Statistics, Virtual/Seoul, Korea, Jul. 2021
50. “Equivariant Variance Estimation for Multiple Change-point Model”, 2021 ICSA Applied Statistics Symposium, Virtual, Sep. 2021
51. “Quadratic Discriminant Analysis by Projection”, 2022 ICSA Applied Statistics Symposium, Gainesville, FL, Jun. 2022
52. “Quadratic Discriminant Analysis by Projection”, ICSA-Canada Chapter Symposium 2022, Banff, Canada, Jul. 2022
53. “Simultaneous Change-point Detection and Curve Estimation”, WNAR 2023 Conference, Anchorage, Alaska, Jun. 2023
54. “Covariance Estimation and Inference for Time Series Data with Mean Changes”, 8th International Workshop in Sequential Methodologies, Utah, May 2024
55. “Covariance Estimation and Inference for Time Series Data with Mean Changes”, WNAR 2024 Conference, Colorado, Jun. 2024
56. “Dynamic Supervised Principal Component Analysis for Classification”, 2024 ICSA China Conference, Wuhan, China, Jun. 2024
57. “Kernel Density Balancing with Application in Hi-C data”, 2025 ICSA China Conference, Zhuhai, China, Jun. 2025

Contributed Conference Talk

58. “Group Iterative Sure Independence Screening”, ENAR 2011 Spring Meeting, Miami, FL, Mar. 2011

Poster

59. “Interaction Screening for Ultra-High Dimensional Data”, 14th Meeting of New Researchers in Statistics and Probability, San Diego, CA, Jul. 2012

Student Advisory

Ph.D. Dissertations Directed (Completed)

1. Yue Zeng (Ph.D. 2017), “Variable Screening in Multi-Category Classification for Ultra-High Dimensional Data”. GIDP in Statistics, the University of Arizona, (co-advised with Hao Helen Zhang). First job: Statistician, Puma Biotechnology.
2. Ruiyang Wu (Ph.D. 2022), “New Dimension Reduction Methods for Quadratic Discriminant Analysis”. Department of Mathematics, the University of Arizona. First job: Postdoc, Department of Biostatistics, New York University.

3. Zhaoying Lu (Ph.D. 2023), “Simultaneous Change-point Detection and Curve Estimation for Single and Multiple Sequential Data”. GIDP in Statistics and Data Science, the University of Arizona, (co-advised with Hao Helen Zhang). First job: Biostatistician, Nemours.
4. Wenbo Ouyang (Ph.D. 2023), “Dynamic Supervised Principal Component Analysis for Classification”. GIDP in Statistics and Data Science, the University of Arizona, (co-advised with Hao Helen Zhang). First job: Data Scientist, Navy Federal Credit Union.
5. John Park (Ph.D. 2025), “Spectral Analysis of the Degree-Corrected Laplacian”. Department of Mathematics, the University of Arizona. First job: Postdoc, Business School, University of Hong Kong.

Ph.D. Dissertations Directed (In-Progress)

6. Xiyang Mo, GIDP in Statistics and Data Science, the University of Arizona, 2022- (co-advised with Yue Selena Niu).
7. Ziyang Liu, GIDP in Statistics and Data Science, the University of Arizona, 2022- (co-advised with Hongxu Ding).
8. Jeffrey Mei, GIDP in Statistics and Data Science, the University of Arizona, 2022- (co-advised with Yue Selena Niu).
9. Sungmin Ji, GIDP in Statistics and Data Science, the University of Arizona, 2025-

Master Students (Chair)

1. Ruoyu Huang (2016), GIDP in Statistics, the University of Arizona.
2. Elliot Kennedy (2024), GIDP in Statistics and Data Science, the University of Arizona.

Graduate Students (Dissertation Committee Member)

1. Sylvain Lacaze (Ph.D. 2015), Department of Aerospace and Mechanical Engineering, the University of Arizona.
2. Meng Lu (Ph.D. 2020), GIDP in Statistics, the University of Arizona.
3. Kyungmi Chung (Ph.D. 2021), GIDP in Statistics and Data Science, the University of Arizona.
4. Derick J. Bishop (Ph.D. 2022), GIDP in Statistics and Data Science, the University of Arizona.
5. Liyun Zeng (Ph.D. 2022), GIDP in Statistics and Data Science, the University of Arizona.
6. Ah Young Kim (Ph.D. 2023), GIDP in Statistics and Data Science, the University of Arizona.
7. Tugce Koc (Ph.D. 2024), Department of Mathematics, the University of Arizona.
8. Sijia Liao (Ph.D. in progress), GIDP in Statistics and Data Science, the University of Arizona.
9. Marcel Hudiani (Ph.D. in progress), Department of Mathematics, the University of Arizona.
10. Shudong Sun (Ph.D. in progress), GIDP in Statistics and Data Science, the University of Arizona.
11. Ahmad Hakeem Abdul Wahab (M.S. 2015), GIDP in Statistics, the University of Arizona.
12. Jing Li (M.S. 2018), GIDP in Statistics, the University of Arizona.
13. Drew Baldwin (M.S. 2020), GIDP in Statistics and Data Science, the University of Arizona.
14. Duncan Bennett (M.S. 2022), Department of Mathematics, the University of Arizona.

Undergraduate Students (Honor Thesis Advisor)

1. Malin Elisabeth Rapp-Olsson (2013).

Undergraduate Students via NSF-REU program

1. Sophia Wang (2019). REU under NSF-CCF-1740858.
2. Alex Dunn (2021). REU under NSF-DMS-1937229.

Professional Membership

International Chinese Statistical Association (ICSA)

American Statistical Association (ASA)

Western North American Region of the International Biometric Society (WNAR)

Teaching Experience

The University of Arizona

- DATA 375 *Introduction to Statistical Computing*, Spring 2019, Fall 2021, Spring 2022, Fall 2022, Fall 2023, Fall 2025.
- MATH 125 *Calculus I*, Fall 2012.
- MATH 129 *Calculus II*, Spring 2013, Spring 2014, Fall 2016, Spring 2017, Spring 2019, Fall 2020.
- MATH 263 *Introduction to Statistics and Biostatistics*, Fall 2010, Fall 2015, Spring 2016.
- MATH 363 *Introduction to Statistical Methods*, Fall 2017.
- MATH 466 *Theory of Statistics*, Fall 2011, Fall 2017.
- MATH 529 *Topics in Modern Analysis (Multivariate Statistics)*, Spring 2015.
- MATH/STAT 566 *Theory of Statistics*, Spring 2025, Spring 2026.
- MATH/STAT 567A *Theoretical Statistics I*, Spring 2014, Spring 2016, Spring 2018, Fall 2020, Fall 2022, Fall 2024.
- MATH/STAT 567B *Theoretical Statistics II*, Fall 2018, Spring 2021, Spring 2023, Spring 2025.
- MATH 577 *Topics in Applied Mathematics (High Dimensional Probability and Nonasymptotic Statistics)*, Fall 2023.
- STAT 675 *Statistical Computing*, Spring 2011, Spring 2012, Spring 2024, Spring 2026.