Naveen N. Narisetty

Associate Professor of Statistics
2022-2023 Helen Corley Petit Scholar
University of Illinois at Urbana-Champaign

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Education

2011–2016	**Ph.D. in Statistics**, University of Michigan, Ann Arbor, MI.
	Advisors: Professors Xuming He and Vijay Nair
2011–2012	**Master of Arts in Statistics**, University of Michigan, Ann Arbor, MI.
2008–2010	**Master of Statistics (with Distinction)**, Indian Statistical Institute, Kolkata.
2005–2008	**Bachelor of Statistics (Hons.)**, Indian Statistical Institute, Kolkata.

Professional Appointments

2022 –	**Associate Professor with Tenure**, University of Illinois at Urbana-Champaign, IL.
2022 – 2023	**Helen Corley Petit Scholar**, University of Illinois at Urbana-Champaign, IL.
2016 – 2022	**Assistant Professor of Statistics**, University of Illinois at Urbana-Champaign, IL.
2019 - 2020	**Beckman Fellow**, Center for Advanced Study, UIUC.
Spring 2019	**Visiting Fellow**, Statistical and Applied Mathematical Sciences Institute, Durham, NC.
Fall 2016 –	**Faculty Affiliate**, Illinois Informatics Institute, UIUC.
Fall 2018 –	**Faculty Affiliate**, Institute for Genomic Biology, UIUC.

Grants, Honors and Awards

From International Indian Statistical Association (IISA):

2022	Early Career Award in Statistics and Data Science (ECASDS).
	Received the inaugural ECASDS Award at the 2022 IISA conference for outstanding contributions to the field of statistics and data science in 'Methodology and Applications' category. This award was called the Young Statistical Scientist Award in previous years.

From National Science Foundation (NSF):

2020 - 2025	Faculty Early Career Development (CAREER) Award, PI: N. N. Narisetty.
	Project Title: Flexible and efficient exploration of the Bayesian framework for high-dimensional modeling
	– CAREER program provides the NSF's most prestigious awards to early-career faculty who have the potential to serve as academic role models in research and education.
2018 - 2022	Division of Mathematical Sciences Grant No. 1811768, PI: N. N. Narisetty.
	Project Title: New Approaches for Censored Quantile Regression Models via Data Augmentation

From University of Illinois at Urbana-Champaign:

2022 - 2023	Helen Corley Petit Scholarship.
	– Awarded based on extraordinary research and teaching performance demonstrated in the promotion and tenure dossier.

2019 - 2020	Beckman Fellowship from the Center for Advanced Study.
	– Awarded annually to about eight outstanding Assistant Professors across the university based on research record and quality of research proposals submitted
2018 - 2020	Placed four times on the List of Teachers Ranked as Excellent.
	(STAT 527 - Fall 2020 & Fall 2019, STAT 425 - Fall 2018, and STAT 578 - Fall 2018)
	– A selective honor awarded for excellent instruction based on student evaluations

From University of Michigan, Ann Arbor:

April 2017	ProQuest Distinguished Dissertation Award, Rackham Graduate School.
	Awarded annually for exceptional theses across the university
2015-2016	Rackham Predoctoral Fellowship for Excellent Dissertation, Rackham Graduate School.
2014-2015	Outstanding Graduate Student Istructor Award, Department of Statistics.
2011-2012	Outstanding Ph.D. Student Award, Department of Statistics.

From American Statistical Association:

Aug 2015	Best Student Paper Award, Nonparametric Statistics Section, JSM 2015.
Aug 2014	Best Student Paper Award, Statistical Learning and Data Mining Section, JSM 2014.
July 2014	Conference Travel Award, International Indian Statistical Association Conference 2014.

Other Scholarships:

April 2020	ICERM Scholarship, Workshop on Computational Statistics and Data-Driven Models.
June 2015	QPRC Scholarship, Quality and Productivity Research Conference.
June 2011	Debesh Kamal Merit Scholarship for Studying Abroad, Ramakrishna Mission Institute of Culture, Kolkata.

Teaching Experience

Faculty Instructor at UIUC
Actuarial Statistics II (ASRM 402/ STAT 409) - Fall 2022
Special Topics in Statistics (STAT 578): Quantile Regression - Fall 2022
Advanced Regression Analysis (STAT 527) - Fall 2019 (Offered for the first time), Fall 2020
Applied Regression and Design (STAT 425) - Fall 2016, Spring 2017, Spring 2018, Fall 2018, Fall 2020
Mathematical Statistics II (STAT 511) - Spring 2018
Special Topics in Statistics (STAT 578): Advanced Statistical Modeling - Fall 2018

Placed five times on the List of Teachers Ranked as Excellent by the university for STAT 527, for STAT 425, and for STAT 578.

Graduate Student Instructor at UM
Introduction to Statistics and Data Analysis (Stats 250) - Fall 2011
Introduction to the Design of Experiments (Stats 470) - Fall 2014
Qualifying Review (QR) Exam Tutor for PhD Students - 2013 to 2015

Excellence in Teaching Award (2014-2015) for the teaching in Stats 470 and QR tutoring.

Volunteer Experience

President, Association for India's Development (AID), Ann Arbor   2014, 2015
– AID is a US registered 501(c)(3) non-profit organization that helps the underprivileged in India.

Volunteer, Rackham Graduate School Volunteer Corps, University of Michigan   Winter 2015

Publications

(Note: ⋆ indicates graduate student author)

Research Papers:

1. Wu, Teng.⋆, **Narisetty, N.N.**, and Yang, Y. (2023). Statistical Inference via Conditional Bayesian Posteriors in High-Dimensional Linear Regression. **Electronic Journal of Statistics.**

2. **Narisetty, N.N.** and Koenker, R. (2022). Censored Quantile Regression Survival Models with a Cure Proportion. **Journal of Econometrics** 226: 192-203.

3. Gan, L.⋆, **Narisetty, N.N.**, and Liang, F. Bayesian Modeling for Gaussian Conditional Random Fields. (2022). **Statistica Sinica** 32, 131-152.

4. Benedetti, M., and Berrocal, V. J., and **Narisetty, N.N.** (2022). Identifying Regions of Inhomogeneities in Spatial Processes via an M-RA and Mixture Priors. **Biometrics** 78(2): 798-811.

5. Mrkvicka, T., Myllymaki, M., and **Narisetty, N.N.** (2022). New methods for multiple testing in permutation inference for general linear model. **Statistics in Medicine** 41 (2), 276-297.

6. Li, K.⋆, Yang, Y., and **Narisetty, N.N.** (2021). Regret Lower Bound and Optimal Algorithm for High-Dimensional Contextual Linear Bandit. **Electronic Journal of Statistics** 15(2): 5652-5695.

7. Harris, T., Li, B., Steiger, N., Smerdon, J., **Narisetty, N. N.**, Tucker, J.D. (2021). Testing the exchangeability of two spatiotemporal random processes. **Journal of the American Statistical Association** 116: 1100-1113.

8. Yang, X.⋆, Gan, L., **Narisetty, N.N.**, and Liang, F. (2021). Group Estimation of Multiple Bayesian Graphical Models. **Journal of Machine Learning Research** 22(54):1-48.

9. Wu, T.⋆, and **Narisetty, N.N.** (2021). Bayesian Multiple Quantile Regression with a Score Based Likelihood. **Bayesian Analysis** 16 (3): 875-903.

10. Jonathan Boss, J., Chen, Y., **Narisetty, N.N.**, Wu, Z., Ferguson, K. K., Meeker, J. D., and Mukherjee, B. (2021). A Hierarchical Integrative Group LASSO framework for analyzing environmental mixtures. **Environmetrics** 32 (8), e2698.

11. Yang, X.⋆ and **Narisetty, N.N.** (2020). Group Selection with Hierarchical Bayesian Modeling. **Bayesian Analysis** 15(3): 909-935.

12. **Narisetty, N. N.** (2020). Discussion of "Horseshoe Regularization for Machine Learning in Complex and Deep Models". **International Statistical Review** 88(2): 330-334.

13. **Narisetty, N.N.**, Shen, J., and He, X. (2019). Skinny Gibbs: A Consistent and Scalable Gibbs Sampler for Model Selection. **Journal of the American Statistical Association (Theory & Methods)**, 114: 1205-1217.

14. Gan, L.*, **Narisetty, N.N.**, and Liang, F. (2019). Bayesian Regularization for Graphical Models with Unequal Shrinkage. **Journal of the American Statistical Association (Theory & Methods)**, 114: 1218-1231. (Winner of SBSS Student Paper Award by Lingrui Gan).

15. Gan, L.*, Yang, X.*, **Narisetty, N.N.**, and Liang, F. (2019). Bayesian Joint Estimation of Multiple Graphical Models. **Conference on Neural Information Processing Systems**.

16. **Narisetty, N.N.**, Bhramar Mukherjee, B., Chen, Y., Gonzalez, R., and Meeker, J.D. (2019). Selection of nonlinear interactions by a forward stepwise algorithm: Application to characterizing the health effects of environmental chemical mixtures. **Statistics in Medicine** 38(9):1582-1600.

17. He, F., Posselt, D. J., **Narisetty, N.N.**, Zarzycki, C. M. and Nair, V. N. (2018). Application of Multivariate Sensitivity Analysis Techniques to AGCM-Simulated Tropical Cyclones. **Monthly Weather Reviews** 146, 2065 - 2088.

18. Yang, X., **Narisetty, N.N.**, and He, X. (2018). A New Approach to Censored Quantile Regression Estimation. **Journal of Computational and Graphical Statistics** 27 (2): 417 - 425.

19. Lim, H., **Narisetty, N.N.**, Cheon, S. (2017). Robust Multivariate Mixture Regression Models with Missing Information. **Journal of Statistical Computation and Simulation** 87 (2): 328 -347.

20. **Narisetty, N.N.**, Nair, V.N. (2016). Extremal Notion of Depth for Functional Data and Applications. **Journal of the American Statistical Association (Theory & Methods)** 111: 1705-1714.
    – Winner of Nonparametric Section Student Paper Award

21. Eckner, J. T., Rettman, A., **Narisetty, N.N.**, Greer, J., Moore, B., Brimacombe, S., He, X., Broglio, S. P. (2016). Stability of an ERP-Based Measure of Brain Network Activation in Athletes: A New Electrophysiological Assessment Tool for Concussion. **Brain Injury** 30(9): 1075 - 1081.

22. Broglio, S.P., Pettman, A., Greer, J., Brimacombe, S., Moore, B., **Narisetty, N.N.**, He, X., Eckner, J.T. (2016). Investigating a Novel Measure of Brain Networking Following Sport Concussion. **International Journal of Sports Medicine** 37(9): 714 - 722.

23. **Narisetty, N.N.**, He, X. (2015). Discussion of "Multivariate Functional Outlier Detection". **Statistical Methods and Applications** 24 (2): 209-216.

24. **Narisetty, N.N.**, He, X. (2014). Bayesian Variable Selection with Shrinking and Diffusing Priors. **Annals of Statistics** 42 (2): 789-817.
    – Winner of SLDM Student Paper Award; Also chosen for SBSS Student Paper Award

25. Tait, A.R., Lewis, T.V., Nair,V.N., **Narisetty, N.N.**, Fagerlin, A. (2013). Informing the Uninformed: Optimizing the Consent Message Using a Fractional Factorial Design. **Journal of the American Medical Association - Pediatrics** 167(7): 640 - 646.

26. An, L.C., Demers, M., Kirch,M., Nair, V.N., Dasgupta, K., **Narisetty, N.N.**, Resnicow, K. (2013). Efficacy of Providing Individually Tailored Smoking Cessation Messages for Young Adults. **Journal of the National Cancer Institute Monographs** 47: 209-215.

Book Chapters:

27. **Narisetty, N.N.** (2021). Theoretical and computational aspects of continuous spike-and-slab priors. Chapter in Handbook on Bayesian Variable Selection. Published by **Chapman Hall/CRC**.

28. **Narisetty, N.N.**(2020). Bayesian Model Selection for High Dimensional Data. Chapter in Handbook of Statistics, Volume 43, Principles and Methods for Data Science. Published by **Elsevier**.

Student Advising and Mentoring

PhD Students Graduated:
1. Lingrui Gan (2019; first job at Facebook)
Recipient of the prestigious Dissertation Completion Fellowship from the University of Illinois
–Recipient of Norton prize honorable mention from the Department of Statistics
2. Xinming Yang (2020; first job at Facebook)
–Recipient of Norton prize honorable mention from the Department of Statistics
3. Wenjing Yin (2020; first job at Uber)
4. Teng Wu (2021; first job at Microsoft)
5. Ke Li (2022; first job at Facebook)
Current PhD Students:
6. Abhishek Ojha
7. Anwesha Chakravarti
PhD Dissertation Committee Member:
Xiao Su, Fei Xue, Yunbo Ouyang, Xiaolu Zhu, Thulasi Ram Khamma (Architecture), Yinyin Chen, Trevor Harris
Masters Students:
Xunyu Chen, Qingyan Xiang

Presentations

Invited Talks and Seminars: (* indicates presentation in remote mode)
○ Department of Data Science, IISER (2023, Pune, India)
○ ISPS Conference (2023, Kochi, India)
○ Department of Statistics, Savitribai Phule Pune University (2023, Pune, India)
○ Department of Mathematics and Statistics, IIT Tirupati (2023, Tirupati, India)
○ Center for Advanced Study, University of Illinois at Urbana-Champaign (2022, Urbana, IL)
○ Department of Statistics, Iowa State University* (2021, Ames, IA)
○ IISA Conference* (2021, Chicago, IL)
○ CMStatistics Conference* (2020, London, UK)
○ Department of Mathematics and Statistics, Univ. of Maryland* (2020, Baltimore County, MA)
○ Department of Statistics, Cochin University of Science and Technology (2020, Kochi, India)
○ Department of Statistics, Washington University at St. Louis (2019, St. Louis, MO)
○ Invited Panel Discussant, Bayesian Frequentist and Fiducial Conference (2019, Durham, NC)
○ Invited Talk, Statistical Methods in Finance Conference (2019, Chennai, India)
○ Department of Statistics, George Washington University (2019, Washington DC)
○ Invited Panelist, Statistics 50th Anniversary Symposium, Univ. of Michigan (2019, Ann Arbor, MI)
○ Invited Talk, International Indian Statistical Association (IISA) Conference (2019, Mumbai, India)
○ Workshop Instructor, IISA Conference (2019, Mumbai, India)
○ International Conference on Computer Age Statistics (2019, Pune, India)
○ IISA Conference (2018, Gainesville, FL)
○ Purdue Symposium (2018, West Lafayette, IN)
○ BayesComp Meeting (2018, Barcelona, Spain)
○ Joint Statistical Meetings (2018, Vancouver, CA)

- 2018 International Conference on Data Science (2018, Shanghai, China)
- School of Statistics, Shanghai University of Finance and Economics (2018, Shanghai, China)
- Department of Mathematics, Indian Institute of Technology Bombay (2018, Mumbai, India)
- Department of Statistics, Acharya Nagarjuna University (2018, Guntur, India)
- SLDS/Nonparametric Statistics Conference (2018, New York City, NY)
- IMS Asia Pacific Rim Meeting (2018, Singapore)
- Department of Biotatistics, Columbia University (2017, New York City, NY)
- Department of Statistics, University of Wisconsin (2017, Madison, WI)
- Department of Biotatistics, University of Iowa (2017, Iowa City, IA)
- Department of Statistics, University of Toronto (2017, Toronto, Canada)
- Department of Statistics, University of Missouri (2017, Columbia, MO)
- International Indian Statistical Association Conference (2017, Hyderabad, India)
- Department of Economics, University of South Bohemia (2017, České Budějovice, Czech Republic)
- CMStatistics Conference (2017, London, UK)
- Applied Statistics Unit, Indian Statistical Institute (2017, Kolkata, India)
- Department of Mathematics and Statistics, Indian Institute of Technology (2017, Kanpur, India)
- Joint Statistical Meetings (2017, Baltimore, MD)
- **Plenary Speaker**, International Statistial Institute Regional Conference (2017, Bali, Indonesia)
- Department of Computer Science, University of Illinois (2017, Urbana-Champaign, IL)
- ISBIS Conference (2017, New York City, NY)
- ICSA Applied Symposium (2017, Chicago, IL)
- Nonparametric Statistics Workshop (2016, Ann Arbor, Michigan)
- Department of Statistics, Purdue University (2016, West Lafayette, IN)
- IISA Conference (2016, Corvallis, OR)
- C.R. Rao Advanced Institute of Mathematics, Statistics & Computer Science (2016, Hyderabad)
- Department of Biostatistics, University of Michigan (2016, Ann Arbor, MI)
- Department of Statistics, Duke University (2016, Durham, NC)
- Department of Statistics and Biostatistics, Rutgers University (2016, New Brunswick, NJ)
- Department of Statistics, University of Minnesota (2016, Minneapolis, MN)
- Department of Statistics, Rice University (2016, Houston, TX)
- Department of Statistics, Ohio State University (2016, Columbus, OH)
- Department of Statistics, University of Florida (2016, Gainesville, FL)
- Department of Statistics, University of Illinois (2016, Urbana-Champaign, IL)
- Department of Statistics, North Carolina State University (2016, Raleigh, NC)
- Department of Statistics and Biostatistics, Florida State University (2016, Tallahassee, FL)
- Department of Statistics, University of Michigan (2015, Ann Arbor, MI)
- World Statistics Congress (2015, Rio de Janeiro, Brazil)
- Quality & Productivity Research Conference (2015, Raleigh, NC)
- Shanghai Center of Mathematical Sciences & The Department of Statistics, Fudan University (2015, Shanghai, China)
- Department of Statistics and Probability, Michigan State University (2014, East Lansing, MI)
- Midwest Statistics Research Colloquium (2014, Chicago, IL)
- International Conference on Statistics and Society in the New Information Age: Challenges and Opportunities (2014, Colombo, Sri Lanka)
- Statistics and Mathematics Unit, Indian Statistical Institute (2013, Kolkata)

Student Paper Award Talks:
- Joint Statistical Meetings (2015, Seattle, WA)

- Joint Statistical Meetings (2014, Boston, MA)

Other Presentations:
- Invited Poster, JSM (2015, Seattle, WA)
- Topic Contributed Talk, JSM (2015, Seattle, WA)
- Oral Presentation, MSSISS (2015, Ann Arbor, MI)
- Poster Presentation, NSF Conference on Statistics for Complex Systems (2015, Madison, WI)
- Poster Presentation, Robust Rank Based Conference (2015, Kalamazoo, MI)
- Student Talk, International Indian Statistical Association Conference (2014, Riverside, CA)
- Contributed Talk, JSM (2013, Montreal, Canada)

Professional Service

Associate Editor

Technometrics (2019 - 2022)
Journal of Nonparametric Statistics (2019 -)
Sankhya, Series A (2021 -)

Grant Reviews:

NSF Panelist, 2019, 2020

External reviewer for NSF grant proposals (2)

Hong Kong Research Grants Council (7)

UIUC Campus Research Board Grants (2)

Journal Reviewer:

Journal of the American Statistical Association (27 papers)
Computational Statistics and Data Analysis (3)
Annals of Applied Statistics (3)
Journal of Machine Learning Research (2)
Journal of Computational and Graphical Statistics (2)
International Statistical Review (2)
Journal of the Royal Statistical Society (1)
Information and Inference: A Journal of the IMA (1)
Electronic Journal of Statistics (1)
Journal of Multivariate Analysis (1)
SIAM/ASA Journal on Uncertainty Quantification (1)
IEEE Transactions on Network Science and Engineering(1)

Biometrika (5)
Annals of Statistics (4)
Bayesian Analysis (4)
Biometrics (4)
Statistica Sinica (3)
Sankhya (3)
Stat (3)
Statistics in Medicine (2)
Statistical Science (1)
American Statistician (1)
Biostatistics (1)
Bernoulli (1)

Webmaster:

International Society for Business and Industrial Statistics, 2013 - 2015

Conference Organizer:

Scientific Program Committee, International Indian Statistical Association Conference (IISA), Chicago, 2021

Scientific Program Committee, IISA Conference, Mumbai, India 2019

Scientific Program Committee, SLDS/Nonparametric Statistics Conference, New York City 2018

Scientific Program Committee, International Statistical Institute Regional Conference, Bali 2017

Statistical Learning and Data Science Section Representative on Program Committee, Eastern North American Region Spring Meeting, Washington D.C. 2017

Local Organizing Committee, Nonparametric Statistics Workshop, Ann Arbor 2016

Co-organizer, Michigan Student Symposium for Interdisciplinary Statistical Sciences, Ann Arbor 2014

Conference Session Organizer:

Invited Paper Sessions (2), IISA, Chicago, 2021

Invited Paper Session, IISA, Mumbai, India 2019

Invited Paper Sessions (2), Joint Statistical Meetings, Vancouver 2018

Invited Paper Session, IMS Asia Pacific Rim Meeting, Singapore 2018

Invited Paper Session, SLDS/Nonparametric Statistics Conference, New York City 2018

Invited Paper Session, IISA Conference, Hyderabad 2017

Invited Paper Session, Joint Statistical Meetings, Baltimore 2017

Invited Paper Session, International Statistical Institute Regional Conference, Bali 2017

Invited Paper Session, International Conference on Statistics for 21st Century, Trivandrum, India 2017

Special Topics Session, ISBA World Meeting, Sardinia, Italy, 2016

Invited Paper Session, World Statistics Congress, Rio de Janeiro, Brazil 2015

Other Service to ASA Sections:

SBSS student paper award competition judge (JSM 2021)

SLDS student paper award competition judge (JSM 2020)

Student paper award competition judge (SLDS Conference 2020)

SBSS student paper award competition judge (JSM 2019)

Roundtable Discussion Leader:

Bayesian Computation for High Dimensional Data, JSM 2015

Department Service

- Inaugural Faculty Advisor for the Student Seminar Series (2018 –)
- Bohrer Workshop Committee Member (2018 –)
- Ph.D. Qualifying Exam Committee Member (2017 – 2021)
- Data Science Task Force Committee Member (2017 –)
- Faculty Search Committee Member (2017 – 2018 and 2021 – 2022)
- Seminar Co-chair (2016 – 2018)
- Ph.D. Program Committee Member (2016 – 2018)
- M.S. Program Committee Member (2016 – 2017 and 2019 – 2020)
- The Illinois Statistics Office Committee Member (2017–)