# **Curriculum Vitae**

#### January 9, 2024

#### Name: T. N. Sriram

#### **Contact information:**

- Department of Statistics, University of Georgia, Athens, GA 30602-1952.
- Office: (706) 542-3305; Fax: (706) 542-3391; E-mail: tn@uga.edu

## **Education:**

- Ph.D. in Statistics, Michigan State University, 1986.
- M.S. in Statistics, University of Pune, India, 1981.
- B. S. in Statistics, Madras Christian College, India, 1979.

#### Academic Ranks and Administrative Positions:

- Professor & Head, University of Georgia, July 2018 Present
- Professor & Interim Head, University of Georgia, 2016 June 2018
- Associate Head, University of Georgia, 2000 2002 & 2004 2006.
- Graduate Advisor, University of Georgia, 2000-2002.
- Professor, University of Georgia, 1999 Present.
- Associate Professor, University of Georgia, 1992 1999.
- Graduate Coordinator, University of Georgia, 1994-1996
- Visiting Assoc. Professor, Univ. North Carolina at Chapel Hill, Fall 1992.
- Assistant Professor, University of Georgia, 1987 1992.
- Visiting Assistant Professor, Purdue University, 1986 1987.

#### Honors and Awards:

• Abraham Wald Prize in Sequential Analysis, 2015. This is the highest national/international award in the area of Sequential Analysis. Sriram and Iaci's Editor invited paper "Sequential Estimation for Time Series Models" was unanimously voted the best published paper among all papers published in the international journal Sequential Analysis in 2014. This award was presented during the 2015 International Workshop in Sequential Analysis held in Columbia University, where Professor Abraham Wald was a faculty.

- SAS Analytics Shootout Competition, 2015. Faculty advisor for graduate student team that placed first in the 2015 SAS Analytics Shootout competition. Team members were: Fei Liu (Captain), Lina Liao, and Wenbo Wu.
- Fellow of The American Statistical Association, 2009. Citation: "For excellence in research with outstanding contributions to sequential estimation and bootstrap methods for time series and branching processes, and substantive contributions to robustness and dimension reduction; and for excellence in teaching, advising, administration and service to the field."
- Special Sandy Beaver Teaching Award, 2004, UGA, given in recognition of "Excellence in Teaching." This award honors outstanding faculty in the university, who have shown dedication and sustained commitment to high-quality instruction.

## Research Grants (Continuous NSA/NSF funding as PI/Co-PI from 1999-2017):

- PI, National Science Foundation-DMS, Research Grant, 2013-2017 (with one-year no cost extention).
- PI, National Security Agency, Research Grant, 2011 2013.
- PI, National Security Agency, Research Grant, 2008 2010.
- PI, Coca-Cola Center for Marketing Studies, UGA, Research Grant, 2004 2006.
- Co-PI, *National Science Foundation*-SES-MMS (with PI, Gauri S. Datta), Research Grant, 2003 2007 (with one-year no cost extention).
- PI, National Security Agency, Research Grant, 1999 2002.
- **Co-PI**, *National Science Foundation SCREMS Grant* (with Lynne Billard and Somnath Datta), **1995 1997**.
- PI, UGA Faculty Research Grant, 1988 1989, 1990 1991.

#### Contracts and other grants:

- PI, Provost Summer 2013 Research Grant & at least three Provost Travel funds.
- **PI**, Financial support for "International Workshop in Sequential Methodologies" from the OVPR, President's office, Franklin College, Graduate School, Department of Statistics, and Aptiv Solutions.
- **PI**, UGA Summer 2012 Innovative Instructional Grant– This award was to introduce an online version of MSIT 3000 into the Statistics curriculum.
- PI, U.S. Bureau of Labor Statistics, Contract, 2001 2002.

## **Instruction:**

- Introduced STAT 3000 into the Statistics curriculum in 2002. Students who took STAT 3000 received credit toward MSIT 3000. In AY 2011, STAT 3000 was renamed as MSIT 3000 and Statistics began teaching almost all the sections of the course.
- Introduced Statistics Bootcamp for students entering our graduate program. Ever since 2017, this 2-week long course has been offered every year during the end of July.
- Introduced a new Bachelor's degree in Data Science in Fall 2019. The enrollment in this new major has quadrupled.
- Introduced a new Master's degree in Data Science in Fall 2022.
- Working with a task force to introduce an online Master's degree in Data Science.
- Spring 2010-Fall 2023: Taught a total of 34 courses from introductory statistics (MSIT 3000E) to the most advanced doctoral courses. There were also 8 different new preparations marked in bold. The table below gives a listing of distinct courses taught along with the Ave-OTE on a 5-point scale, which is computed by averaging the "Overall Teaching Evaluation (OTE)" ratings over the number of times taught. Here, 5 denotes "Excellent".

Course	Title	Times Taught	Ave-OTE
<b>MSIT 3000E</b>	Statistical Analysis for Business	3	4.64
STAT 4110H	Honors Applied Statistics	5	4.82
STAT $4/6230$	Applied Regression Analysis	3	4.75
STAT 4/6280	Applied Time Series Analysis	7	4.75
STAT $4/6360$	Statistical Software Programming	2	4.86
STAT 4510	Mathematical Statistics I	2	4.92
STAT 4520	Mathematical Statistics II	4	4.90
STAT 6520	Mathematical Statistics II	2	4.79
STAT 6810	Probability Distributions	1	4.83
STAT 8530	Advanced Statistical Inference I	4	4.69
STAT 8540	Advanced Statistical Inference II	1	4.75

• Median "Overall Teaching Evaluation" (Spring 2010- Fall 2023) for the 34 courses is 4.83 out of 5.

**Editorial Board & Professional Service:** 

• Institute of Mathematical Statistics (IMS), Managing Editor for all FIVE IMS journals (The Annals of Statistics, The Annals of Probability, The Annals of

Applied Probability, The Annals of Applied Statistics, Statistical Science) & The IMS Bulletin: Jan. 1, 2014 - Dec. 31, 2019. IMS journals are one of the top-tier journals in Statistics.

- Co-Editor Springer Festschrift in Honor of Dr. Hira L. Koul, 2012-Present.
- Associate Editor, Statistics and Probability Letters, 2002 2009.
- Associate Editor, Sequential Analysis, 1997 Present.
- Associate Editor Journal of Indian Statistical Association, 1997 Present.

**Professional Review Service:** 

- Served on National Science Foundation Panel Review: 2009, 2014, 2015, 2019 (CA-REER PANEL), 2020.
- Have also reviewed several NSF and NSA proposals over the years.
- Reviewed Promotion & Tenure folders for at least 12 external candidates.
- Book Reviews: Sequential Estimation by Ghosh, Mukhopadyay and Sen, Wiley, New York. JASA Review; Asymptotics in Statistics by Le Cam and Yang, Springer. JASA Review. In addition, reviewed books for JSPI, Springer and Wiley.
- Journal Reviews: Served and continue to serve as a referee for a variety of journals, including top-tier journals such as, The Annals of Statistics, Journal of the American Statistical Association, Journal of Computational and Graphical Statistics, Biometrika.

## Departmental & University Administration and Services:

- Served on Program Review and Assessment Committee (2016-2018); was part of a three-member review team to review Management Information Systems (2016-17) and Mathematics Department (2017-18).
- Served on the Department Head Search Committee, 2014-15.
- Served several times on the College Promotion Committees; University Promotion Committees; and served as a Faculty Senator twice.
- Served on many departmental committees as chair or member.

## Membership in Societies:

- Institute of Mathematical Statistics
- American Statistical Association

## Areas of Research:

- Sequential inference for independent data and dependent data (e.g. time series, branching processes with immigration)
- Large sample statistical inference including bootstrap methods for *Linear and Non-linear time series*, and single and multi-type branching processes and controlled branching processes
- Robust estimation methods for mixture models, mixture regression, and partial mixture models. Used nonparametric, parametric and semi-parametric approaches with extensive illustrations via real data analysis
- **Dimension reduction methods** in time series. Used nonparametric approaches with extensive illustrations via real data analysis
- **Divergence based multivariate association studies**. Used nonparametric approaches with applications to morphometrics
- Robust dimension reduction methods in regression, time series, and multivariate association studies. Currently pursuing this line of research using Rényi divergences
- Sample size determination for classifiers arising in biological studies. Used parametric approaches and approximations to analyze data arising in bioinformatics. Currently developing approaches for classification to three or more populations
- Big (Time Series) data analysis using Subsampling. Currently investigating subsampling approaches to make inference about big time series data.

**Publications:** First authorship given to past/current doctoral students, indicated by "\*" below. On collaborative articles, the corresponding author is denoted in blue.

- 1. Sriram, T. N. (1987). Sequential estimation of the mean of a first order stationary autoregressive process. *The Annals of Statistics*, **15** 1079-1090.
- 2. Sriram, T. N. (1988). Sequential estimation of the autoregressive parameter in a first order autoregressive process. *Sequential Analysis*, 7 53-74.
- Sriram, T. N. and Bose, A. (1988). Sequential shrinkage estimation in the general linear model. *Sequential Analysis*, 7 149 - 163.
- 4. Sriram, T. N. (1990). Sequential estimation of ratio of normal parameters. *Journal of Statistical Planning and Inference*, 26 305-324.
- 5. Sriram, T. N., Basawa, I. V. and McCormick, W. P. (1990). Sequential estimation for dependent observations with applications to non-standard autoregressive processes. *Stochastic Processes and their Applications*, **35** 149-168.

- Sriram, T. N. (1991). On the uniform strong consistency of an estimator of the offspring mean in a branching process with immigration. Statistics and Probability Letters, 12 151-155.
- Sriram, T. N., Basawa, I. V. and Huggins, R. M. (1991). Sequential estimation for branching processes with immigration, *The Annals of Statistics*, 19 2232-2243.
- Sriram, T. N. (1991). Second order approximations to the risk of a sequential procedure measured under squared relative error loss. *Statistics and Decisions*, 9 375-392.
- Mukhopadhyay, N. and Sriram, T. N. (1992). On sequential comparison of means of first-order autoregressive models. *Metrika*, 39 155-164.
- Sriram, T. N.. (1992). An improved sequential procedure for estimating the regression parameter in regression models with symmetric errors. The Annals of Statistics, 20, 1441-1453.
- Datta, G. S. and Sriram, T. N. (1992). Pitman representations of the best equivariant predictors for regression models with symmetric errors. *Statistics and Decisions*, 10 367-388.
- 12. New Researcher's Committee Report (1992). Reader's comments to the New Researcher's Committee Report: Rejoinder. *Statistical Science*, 7 265-266.
- Sriram, T. N. (1993). Validity of sequential bootstrap for sub-critical and critical branching processes. *Sequential Analysis*, 12 247-252.
- Sriram, T. N. (1994). Invalidity of bootstrap for critical branching processes with immigration. *The Annals of Statistics*, 20, 1012-1023.
- Datta, S. and Sriram, T. N. (1995). A Modified bootstrap for branching processes with immigration. *Stochastic Processes and Their Applications*, 56 275-294.
- Datta, S. and Sriram, T. N. (1997). A modified bootstrap for autoregression without stationarity. *Journal of Statistical Planning and Inference*, 59 19-30.
- Rosenberger, W. F. and Sriram, T. N. (1997). Estimation for an adaptive allocation design. *Journal of Statistical Planning and Inference* 59 309-319.
- Etemadi, N., Sriram, T. N. and Vidyashankar, A. N. (1997). L<sub>p</sub> convergence of reciprocals of sample means with applications to sequential estimation in linear regression models. Journal of Statistical Planning and Inference, 65 1 - 15.
- 19. Sriram, T. N. (1998). Asymptotic expansions for array branching processes with applications to bootstrapping. *Journal of Applied Probability*, 35, 12 26.

- Zheng, S.\*, Seila, A. F. and Sriram, T. N. (1998). A sequential fixed-width confidence interval for the product of two means. *Annals of Institute of Statistical Mathematics*, 50 119 145.
- 21. Zheng, S.\*, Seila, A. F. and Sriram, T. N. (1998). Asymptotically risk efficient two-stage procedures for estimating the product of  $(k \ge 2)$  means. *Statistics and Decisions*, 16 369-387.
- Shete, S.\* and Sriram, T. N. (1998). Fixed precision estimator of the offspring mean in branching processes, *Stochastic Processes and Their Applications*, 77 17-33.
- Lee, S. and Sriram, T. N. (1999). Sequential point estimation of parameters of threshold AR(1) model. *Stochastic Processes and Their Applications*, 84 343-355.
- Sriram, T. N. and Vidyashankar, A. N. (2000). Minimum Hellinger distance estimation for supercritical Galton-Watson processes, *Statistics and Probability Letters*, 50 331-342.
- Sriram, T. N. and Vidyashankar, A. N. (2000). Sequential point estimation for branching processes-I, sub-critical case, *Sequential Analysis*, 19 77-92.
- Sriram, T. N. (2001). Fixed size confidence regions for parameters of threshold AR(1) models, *Journal of Statistical Planning and Inference* 97 293-304.
- Sriram, T. N. and Vidyashankar, A. N. (2001). Sequential estimation for supercritical branching processes. *Sequential Analysis*, 20 263-277.
- Shete, S.\* and Sriram, T. N. (2002). A note on estimation in multi-type supercritical branching processes with immigration. *Sankya* 65 107-121.
- 29. Zheng, S.\*, Seila, A. F. and **Sriram, T. N.** (2002). An asymptotically risk-efficient sample allocation procedure for estimating mean waiting time in the M/M/1 queue with extension to  $M/E_k/1$  queue, **Stochastic Models**, 18, 565-587.
- Sriram, T. N. (2002). Book Review: Asymptotics in Statistics. 2nd Edition, by Le Cam, L. and Yang, G. Journal of American Statistical Association, March 2002.
- Wei, Xinyu \* and Sriram, T. N. (2004). Interval estimation approach to counting by weighing: A sequential scheme. *Sequential Analysis*, 23 285 - 296.
- 32. Karunamuni, R. J., Sriram, T. N. and Wu, J. (2006). Asymptotic normality of an adaptive kernel density estimator for finite mixture models. *Statistics and Probability letters* 76, 211-220.

- 33. Karunamuni, R. J., Sriram, T. N. and Wu, J. (2006). Rates of convergence of an adaptive kernel density estimator for finite mixture models. *Statistics and Probability letters*, 76, 221-230.
- 34. Wei, Xinyu \* and Sriram, T. N. (2006). Counting by weighing: An alternative sampling scheme. *Sequential Analysis*, 25 241-255.
- Lee, S., Sriram, T. N. and Wei, Xinyu.\* (2006). Fixed-width confidence interval based on a minimum Hellinger distance estimator. *Journal of Statistical Plan*ning and Inference, 136 4276-4292.
- Woo, Mi-Ja \* and Sriram, T. N. (2006). Robust estimation of mixture complexity. Journal of American Statistical Association, 101 1475-1486.
- Woo, Mi-Ja<sup>\*</sup> and Sriram, T. N. (2007). Robust estimation of mixture complexity for count data. *Computational Statistics and Data Analysis*,51 4379-4392.
- Sriram, T. N., Bhattacharya, A., Gonzalez, M., Martinez, R., del Puerto, I. (2007). Estimation of the offspring mean in a controlled branching process with a random control function. *Stochastic Processes and Their Applications*, 117 928-946.
- Xiangrong, Y. and Sriram, T. N. (2008). Common canonical variates for independent groups using information theory. *Statistica Sinica*, 18, 335-353.
- 40. Iaci, R.\*, Yin, X., Sriram, T. N. and Klingenberg, C. (2008). An informational measure of association and dimension reduction for multiple sets and groups with applications in morphometric analysis. *Journal of the American Statistical Association*, 103, 1166-1176.
- 41. Umashanger, T.\* and Sriram, T. N. (2009). L<sub>2</sub> estimation of mixture complexity for count data, *Computational Statistics and Data Analysis*, 53, 4243-4254.
- Park, J. H.\*, Sriram, T. N. and Yin, X. (2009). Central mean subspace in time series. *Journal of Computational and Graphical Statistics*, 18, 717-730.
- Park, J. H.\*, Sriram, T. N. and Yin, X. (2010). Dimension reduction in time series. Statistica Sinica, 20, 747-770.
- Iaci, R.\*, Sriram, T. N. and Yin, X. (2010). Multivariate association and dimension reduction: A generalization of canonical correlation analysis. *Biometrics*, 66, 1107-1118.
- Xinyu, L.\*, Wang, Y., Rekaya, R., and Sriram, T. N. (2012). Sample size determination for classifiers based on single-nucleotide polymorphisms. *Biostatistics*, 13 (2), 217-227.

- 46. Umashanger, T.\*, Sriram, T. N., and Lee, J.(2012). Simultaneous robust estimation in finite mixtures: The Continuous case. Editor-Invited article for the Golden Jubilee of *Journal of Indian Statistical Association*, 50, 277-295.
- Iaci, R.\* and Sriram, T. N. (2013). Robust Multivariate Association and Dimension Reduction Using Density Divergences. *Journal of Multivariate Analysis*, 117, 281-295.
- Contemporary Developments in Statistical Theory: A Festschrift for Hira Lal Koul (2013). Co-Editors: Soumendra Lahiri; Anton Schick; Ashis SenGupta; and T.N. Sriram. Springer. This contains 23 articles by leading statisticians.
- 49. Sriram, T. N., and Iaci, R. (2014). Editor's Special Invited Paper: Sequential Estimation for Time Series Models. *Sequential Analysis.*, 33, 136-157.
- 50. Sriram, T. N., and Iaci, R. (2014). Authors' Response to Eight discussion pieces on Sequential Estimation for Time Series Models. Sequential Analysis., 33, 194-204.
- 51. Lee, J.\*, and Sriram, T. N. (2014). On the Performance of  $L_2E$  Estimation in Modeling Heterogeneous Count Responses with Extreme Values. Journal of Statistical Computation and Simulation, 84, 564-581.
- 52. Xinyu, L., Wang, Y., and Sriram, T. N. (2014). Determination of Sample Size for a Multi-class Classifier based on Single-Nucleotide Polymorphisms: A Volume Under the Surface approach. *BMC Bioinformatics*, 15:190.
- Sriram, T. N. and Samadi, Y. S. (2016). A Robust Sequential Fixed-Width Confidence Interval For Count Data based on Bhattacharyya-Hellinger Distance Estimator. *Sequential Analysis*, 35, 84-107.
- Park, J-H.\* and Sriram, T. N. (2017). Robust Estimation of Conditional Variance of Time Series using Density Power Divergences. *Journal of Forecasting*, 36, 703-717.
- 55. Lee, B. J.; Daubenmire, S.; Lee, E.; Saremi, R.; Rai, S.; Sriram, T. N.; Mandal, A. and Sharma, S. (2019). The optimization of novel nanocellulose gel-reactive dye coating for textile applications. *Colourage*, 66 (6), 32-41.
- Sriram, T. N. and Samadi, Y. S. (2019). Second-order Analysis of Regret for Sequential Estimation of the Autoregressive Parameter in a First-order Autoregressive Model. *Sequential Analysis*, 38, 411-435.
- 57. Park, J-H\*, Hood, H. B.\*, and Sriram, T. N. (2020). Time Series Central Subspace with Covariates and its Application to Forecasting Pine Sawtimber Stumpage Prices in the Southern United States. *Journal of Korean Statistical Association*, 49(2), 559-577.

- Massaru da Silva, M.\*, Sriram, T. N., and Ke, Y. (2023). Dimension Reduction in Time Series Under the Presence of Conditional Heteroscedasticity. *Computational Statistics and Data Analysis*, 180, April 2023. PDF paper; 22 pages.
- 59. Wu, S., Fang, L., Zhang, J., Sriram, T. N., Coshatt, S, , Zahiri, F., Mantooth, A., Ye, J., Zhong, W., Ma, P., and Song, W. (2023). Unsupervised Anomaly Detection and Diagnosis in Power Electronic Networks: Informative Leverage and Multivariate Functional Clustering Approaches. *IEEE Transactions on Smart Grid*, PDF paper; 12 pages.
- Iaci, R.\* and Sriram, T. N. (2023). Robust Recovery of the Central Subspace for Regression Using the Influence Function of the Rényi Divergence. Accepted in Statistica Sinica, PDF paper: 37 pages & Supplemental Materials: 18 pages.
- 61. Xie, R.\*, Sriram, T. N., Wu, W., and Ma, P. (2024). Online Sequential Leveraging Sampling Method for Streaming Autoregressive Time Series With Application to Seismic Data. *Resubmitted to The Annals of Applied Statistics*, PDF Paper; 47 pages.
- 62. Jiacheng Li<sup>\*</sup>, Datta, G. S., **Sriram, T. N.** (2024). Forecasting U.S. Unemployment Rates Under a Bayesian Framework. **Under Preparation**.

#### Supervision of Student Research:

#### A. Masters Students:

- 3. Haiming, Wang, Spring 2009. Thesis Title: A Time Series Analysis of Mortality and Air Pollution in Hong Kong from 1997 to 2007.
- 2. Adhikari, Murali, Summer 2004. Thesis Title: Forecasting Irrigation Water Demand Under Risk and Uncertainty: Econometrics and Time Series Analysis.
- 1. Zhang, Jidong, M.S., Fall 2004. Thesis Title: *Time Series Analysis of volatility in Financial Markets in Hong Kong from 1991 to 2004.*

#### B. Doctoral Students:

- 14. Dr. Jiacheng Li, Ph.D. 2023. Co-advisor: Dr. Gauri Datta. (Working for Wells Fargo).
- 13. Dr. Murilo Massaru da Silva, Ph.D. 2020. Co-Advisor: Dr. Yuan Ke. (Returned to Brazil after graduation due to the Pandemic)
- Dr. Rui Xie, Ph.D. 2019. (Joined the Department of Statistics at the University Central Florida in Fall 2019 as an Assistant Professor of Statistics). Co-advisor: Dr. Ping Ma.

- 11. Dr. Xinyu, Liu, Ph.D. May 2013 (Currently employed in California), Thesis Title: Sample size determination for classifiers based on single-nucleotide polymorphisms
- Jaejun, Lee, Ph.D. 2010 (Currently working for a Federal Agency in Korea), Thesis Title: L<sub>2</sub>E Estimation for Finite Mixture of Regression Models with Applications and L<sub>2</sub>E with Penalty and Non-normal Mixtures.
- 9. T. Umashanger, Ph.D. 2009 (Associate Professor in the Mathematics Department at Rowan University, New Jersey.) Thesis Title:  $L_2E$  Estimation of Mixture Complexity.
- 8. Ross Iaci, Ph.D. 2007 (Associate Professor of Statistics at William and Mary, Virginia.) Thesis Title: *Multi-Set Association Studies with Applications to Morphometrics*. (Co-director: Xiangrong Yin).
- Jin-Hong Park, Ph.D. 2007 (Associate Professor of Statistics at The College of Charleston, South Carolina.) Thesis Title: *Dimension Reduction in Time Series*. (Co-director: Xiangrong Yin).
- Archan Bhattacharya, Ph.D. 2007 (Working in a Consulting firm in India) Thesis Title: Unified Estimation Theory for Controlled Branching Processes and Bayesian Hypothesis Testing in Zero-Inflated Poisson Regression Model. (Co-director: Gauri S. Datta).
- 5. Mi-Ja Woo, Summer 2005 (Was employed at NISS for two years). Thesis Title: *Robust Estimation in Mixture Models and Small Area Estimation using Cross-Sectional Time Series Models*. (Co-advisor: Gauri S. Datta).
- 4. Wei, XinYu, Ph.D. 2001 (Employed at Celgene, USA) Thesis Title: *Performance of* Sequential Sampling Schemes for some Independent and Dependent models.
- 3. Smith, David, Ph.D. 2001 (Associate Professor at Tennessee Tech. University). Thesis Title: *Bayesian and Minimum Hellinger Distance Approaches to Inference with Applications*. (Co-advisor: Dr. Gauri S. Datta).
- Shete, Sanjay, Ph.D. 1998 (2012 ASA Fellow; Professor & Director, Program in Biomathematics and Biostatistics at the UT M.D. Anderson Cancer Center, Texas). Thesis Title: Estimation Problems in Single and Multi-type Branching Processes and in Physical Mapping of a Chromosome. (Co-director: Dr. Jonathan Arnold, Genetics).
- Zheng, Shen, Ph.D. 1996 (CEO of his company). Thesis Title: Estimation of Product of Means and some Queuing System Performance Measures. (Co-director: Dr. Andrew, F. Seila, Management Science).

#### **Consulting Experience**:

- Statistical Consultant, Bureau of Labor Statistics, 2001-2002. This involved time series modeling and prediction of U.S. unemployment rates for various Metropolitan statistical areas. This experience was also helpful is writing a grant proposal with a colleague (Dr. Gauri Datta), which was later funded by the *National Science Foundation*, 2003-2007.
- Statistical Consultant, Rhone Meriux, Inc. (now called Merial), 1992-1997. Designed experiments and analyzed many datasets over the five years involving efficacy of flea and tick medications for dogs and cats, and also vaccines for cows. This also included preparing the final statistical report of major clinical trials

## Invited Presentations and/or Conference/Workshop Organization:

- Invited talk, Boston-Keio-Tsinghua University Workshop, Boston University, Boston, June 2023.
- Invited Colloquium talk, Department of Statistics and Data Science, University of Central Florida, April 2023, Orlando, Florida.
- Invited talk, International Chinese Statistical Association Applied Statistics Symposium, University of Florida, Gainesville, Florida, June 2022.
- Two more invitations to talk in 2020 and 2021 canceled due to the pandemic.
- Invited talk, 10th International Workshop in Applied Probability (IWAP), June 2020, Thessaloniki, Greece. Canceled.
- Invited talk, EcoSta2019, June 2019, Taichung, Taiwan.
- Invited talk, 4th International Conference on Big Data and Information Analytics, The University of Texas Health Science Center, Houston, **December 2018**.
- Invited talk, The Second International Conference on Mathematics of Data Science, Old Dominion University, Virginia, November 2018.
- Co-organized 2018 Georgia Statistics Day, October 2018. To support the conference participants and expenses, I helped raise \$21,000 [\$6,000 in external funding (State Farm, LexisNexis and Wells Fargo), \$6,500 in UGA funding, and \$8,500 in donation from Dr. Mohamed Al Lawati]. With more than 170 participants, it was the largest conference ever hosted by the Department of Statistics.
- Invited talk, 5th Institute of Mathematical Statistics Asia Pacific Rim Meeting, Singapore, **June 2018**.
- Keynote talk, Langenhop Lecture and SIU Probability and Statistics Conference, Southern Illinois University, Carbondale, IL. May 2018.

- Seminar talk, Central University of Finance and Economics, Beijing, China, **June** 2017.
- Invited talk, 2017 Institute of Mathematical Statistics-China Conference, Nanning, China, **June 2017**.
- UGA featured speaker, Georgia Statistics Day 2016. Georgia Tech, Atlanta, Georgia.
- Invited Talk, **2016** International Indian Statistical Association Conference. Corvallis, Oregon.
- Invited talk at "VI-MSS Workshop on Time Series Analysis," The Indian Institute Science Education and Research in Pune, India, **May 25-31, 2015**. This workshop was jointly organized and funded by the Statistical and Mathematical Sciences Institute (SAMSI) & U.S. National Science Foundation.
- Invited talk at Department of Statistics, University of South Carolina, Columbia, November 2014.
- Invited talk at the Seventh International Workshop on Applied Probability (IWAP 2014), Antalya, Turkey, June 2014.
- Invited talk at Department of Mathematical Sciences, University of Nevada, Las Vegas, November 2013.
- Invited talk at the Joint Statistical Meetings in the session titled "Robust Dimension Reduction in Regression using Renyi Divergence," Montreal, Canada, August 2013.
- Organized the *Fourth International Workshop in Sequential Methodologies*, The University of Georgia, Athens, Georgia, July 2013.
- Invited talk and session organizer at the conference on "Statistics, Science, and Society: New Challenges and Opportunities," organized by the International Indian Statistical Association, January 2013.
- Invited talk at ISyE, Georgia Institute of Technology, Atlanta, November 2012.
- Invited talk at the Joint Statistical Meetings in the session titled "Robust Multivariate Association and Dimension Reduction Using Density Divergences," San Diego, CA, August 2012.
- Invited talk at the conference "An International Workshop on Sequential Methods and Their Applications" to be held in University of Rouen, France, June 2012.
- Invited talk and organizing an invited session at the international conference on "Statistical Concepts and Methods for the Modern World", to be held in Sri Lanka, December 2011.

- Invited talk at the Joint Statistical Meetings in the session titled "Some Recent Developments in inference for mixture and linear errors-in-variables models," Miami, Florida, July-August 2011.
- **Plenary Speaker** at the *Third International Workshop in Sequential Methodologies*, Stanford University, CA, June 2011.
- Invited talk and organizing an invited session at the International Indian Statistical Association Conference on Probability, Statistics and Data Analysis, to be held in North Carolina State University, April 2011.
- Invited talk at the Joint Statistical Meetings, Vancover, Canada, in the session titled New Advances in Disparity and Divergence-Based Inference, August 2010.
- Invited talk at the Conference on *Resampling Methods and High Dimensional Data*, Texas A&M University, March 2010.
- Invited talk at the Seventh Triennial Symposium on Probability and Statistics, Kolkata, India, December 2009.
- Chair and discussant at an invited session in the *Joint Statistical Meetings*, Washington DC, August 2009.
- Invited speaker at the Second International Workshop in Sequential Methodologies, Troyes, France, June 2009.
- Presented a colloquium talk at Cornell University, September 2008.
- Presented two colloquium talks at the University of Pune, India, July 2008.
- Invited speaker at the Conference on *Recent Advances in Statistics* In honor of Dr. Hira Koul's 65th birthday, May 2008.
- Special Invited talk at the *First International Workshop in Sequential Methodologies*, Auburn, July 2007.
- Organizer and Special invited speaker, Special Invited paper session at the *International Conference on Statistics, Probability and Related Areas*, Cochin, India, January 2-5, 2007.
- Presented an invited talk in University of Central Florida, September 2006.
- Presented an invited talk in University of Extremadura, Badajoz, Spain, June 2006.
- Presented an invited talk at the *Fifth Biennial International Conference on Statistics*, *Probability and Related Areas*, IISA Conference, UGA, May 2004.
- Presented an invited talk at the International Conference, Sri Lanka, December 2004.

- Presented an invited talk at an International Conference, India, 2000.
- Presented three lectures in University of Pune, India, during an invited visit, July 1999.
- Minimum Hellinger Distance Estimation for Supercritical Galton-Watson Processes. Joint Statistical Meetings. Dallas, Texas, 1998.
- A modified bootstrap for autoregression without stationarity. International Conference organized by International Indian Statistical Association, Hamilton, Canada, October 1998.
- Fixed Precision Estimator of the Offspring Mean in Branching Processes. Joint Statistical meetings, Anaheim, California, 1997.
- Fixed Precision Estimator of the Offspring Mean in Branching Processes. Purdue University, West Lafayette, IN, 1996.
- Sequential Unbiased Estimation of offspring mean in branching processes. University of Florida, Gainesville, FL, 1996.
- Branching processes with immigration, Symposium on mathematical methods and applications, IIT, Madras, India, December 1996. Special invited talk.
- Sequential Bootstrap for Branching Processes with Immigration. Directions in Sequential Analysis: Workshop, Chapel Hill, N.C., 1994
- Sequential Estimation for Branching Process with Immigration and Sequential Bootstrap for Branching Processes. July 18 24, 1992. Invited talk presented as a participant in the IMS AMS SIAM Summer Research Conference II on Adaptive Designs. South Hadley, Massachusetts.
- Fixed Accuracy Estimation of the Offspring Mean in a Branching Process with Immigration, The IMS Regional meeting at Houston, Texas, 1991.
- Sequential Estimation for Branching Processes with Immigration. Florida State University, 1989.
- Sequential Estimation of Ratio of Normal Parameters, ASA Atlanta Chapter, Atlanta, 1988
- Sequential Estimation for Dependent Observations with an Application to Non Standard Autoregressive Processes, The University of Connecticut, Storrs, 1988.
- Sequential Shrinkage Estimation for Linear Models with AR(1) Errors. Invited paper, presented by a co author at the IMS Annual meeting in Washington D.C., 1988.