

Abhyuday Mandal

amandal@stat.uga.edu

EMPLOYMENT	Associate Professor Department of Statistics University of Georgia, Athens	August 2011 – present
	Undergraduate Coordinator Department of Statistics University of Georgia, Athens	August 2016 – present
	Assistant Professor Department of Statistics University of Georgia, Athens	August 2005 – August 2011
EDUCATION	Ph.D. in Statistics Georgia Institute of Technology, Atlanta	September 2003 – August 2005
	Master of Arts in Statistics University of Michigan, Ann Arbor, MI	September 2001 – August 2003
	M.Stat in Mathematical Statistics and Probability Indian Statistical Institute, Calcutta, India	August 1999 – July 2001
	Bachelor of Statistics Indian Statistical Institute, Calcutta, India	August 1996 – July 1999
EDITORIAL BOARD	Associate Editor, Sankhya B (ISSN: 0976-8386), March 2014 – present.	
	Associate Editor, Statistics and Probability Letters (ISSN: 0167-7152), August 2013 – present.	
	Associate Editor, International Journal of BioSciences and Technology (ISSN: 0974-3987), December 2012 – October 2016.	
	Associate Editor, Pioneer Journal of Theoretical and Applied Statistics (ISSN: 2230-9837), November 2010 – October 2016.	
	Guest co-Editor, Special issue on Discrete Choice Experiments: Theory and Applications, Journal of Statistical Theory and Practice, Taylor & Francis.	
	co-Editor, Handbook of Research on Applied Cybernetics and Systems Science, IGI Global, Hershey, PA.	

PUBLICATIONS

BOOK CO-EDITED

1. Saha, S.; Mandal, A.; Narasimhamurthy, A.; Sarasvathi, V. & Sangam, S. (Eds., 2017). Handbook of Research on Applied Cybernetics and Systems Science (Advances in Computational Intelligence and Robotics), IGI Global, Hershey, PA.

BOOK CHAPTERS

2. Meng, C.; Wang, Y.; Zhang, X.; Mandal, A.; Zhong, W.; & Ma, P. (2017) “Effective Statistical Methods for Big Data Analytics”, in *Handbook of Research on Applied Cybernetics and Systems Science*, Eds. Saha, S.; Mandal, A.; Narasimhamurthy, A.; Sarasvathi, V. and Sangam, S. , IGI Global.
3. Wang, K.; Mandal, A., Ayton, E., Hunt, R., Zeller, A. & Sharma, S. (2016) “Modification of protein rich algal-biomass to form bio-plastics and odor removal”, In: *Protein Byproducts: Transformation from Environmental Burden Into Value-Added Products*, Ed. Dhillon, G.S., Elsevier publishers.
4. Mandal, A.; Yu, Y. & Wong, W.-K. (2015), “Algorithmic Searches for Optimal Designs”, in *Handbook of Design and Analysis of Experiments*, Eds Dean, A., Morris, M., Stufken, J. and Bingham, D., Chapman and Hall/CRC, Series: Chapman & Hall/CRC Handbooks of Modern Statistical Methods.

JOURNAL ARTICLES

5. Yang, J.; Tong, L. & Mandal, A. (2017), “D-optimal designs with ordered categorical data”, *Statistica Sinica*, (accepted) doi:10.5705/ss.202016.0210.
6. Zhang, W.; Mandal, A. & Stufken, J. (2017), “Approximations of the information matrix for a panel mixed logit model”, *Journal of Statistical Theory and Practice*, 11, 269–295.
7. Jones, A.; Mandal, A. & Sharma, S. (2017), “Antibacterial and drug elution performance of thermoplastic blends”, *Journal of Polymers and the Environment*, (accepted).
8. Chakraborty, A.; Datta, G. & Mandal, A. (2016), “A two-component normal mixture alternative to the Fay-Herriot model”, Joint issue of *Statistics in Transition new series and Survey Methodology Part II*, 17, 67–90.
9. Yang, J.; Mandal, A. & Majumdar, D. (2016), “Optimal Designs for 2^k factorial experiments with binary response”, *Statistica Sinica*, 26, 385–411.
10. Jones, A.; Mandal, A. & Sharma, S. (2015), “Protein based bioplastics and their antibacterial potential”, *Journal of Applied Polymer Science*, 132, 41931.
11. Datta, G. & Mandal, A., (2015) “Small Area Estimation with Uncertain Random Effects”, *Journal of the American Statistical Association - Theory and Methods*, 110, 1735–1744.
12. Yang, J. & Mandal, A. (2015), “D-optimal Designs under Generalized Linear Models”, *Communications in Statistics – Simulation and Computation*, 44, 2264–2277.
13. Kao, M. H.; Majumdar, D.; Mandal, A. & Stufken, J. (2013), “Maximin and Maximin-Efficient Event-Related fMRI Designs Under A Nonlinear Model”, *Annals of Applied Statistics*, 7, 1940–1959.
14. Yang, J.; Mandal, A. & Majumdar, D. (2012), “Optimal Designs for Two-level Factorial Experiments with Binary Response”, *Statistica Sinica*, 22, 885–907.
15. Kao, M. H.; Mandal, A & Stufken, J. (2012), “Constrained Multiobjective Designs for Functional Magnetic Resonance Imaging Experiments via a Modified Non-Dominated Sorting Genetic Algorithm”, *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 61, 1-20.
16. Datta, G.; Hall, P. & Mandal, A. (2011), “Model Selection by Testing for the Presence of Small-area Effects in Area-level Data”, *Journal of the American Statistical Association - Theory and Methods*, 106, 362-374.
17. Mandal, A.; Ranjan, P; & Wu, C. F. J. (2009), “G-SELC: Optimization by Sequential Elimination of Level Combinations using Genetic Algorithms and Gaussian Processes”, *Annals of Applied Statistics*, 3, 398-421.

18. Kao, M. H.; Mandal, A. & Stufken, J. (2009), "Efficient Designs for Event-Related Functional Magnetic Resonance Imaging with Multiple Scanning Sessions", *Communications in Statistics – Theory and Methods: Celebrating 50 Years in Statistics Honoring Professor Shelley Zacks*, 38, 3170-3182.
19. Kao, M. H.; Mandal, A.; Lazar, N.; & Stufken, J. (2009), "Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies", *NeuroImage*, 44, 849-856.
20. Kao, M. H.; Mandal, A. & Stufken, J. (2008), "Optimal Design for Event-related Functional Magnetic Resonance Imaging Considering Both Individual Stimulus Effects and Pairwise Contrasts", *Special Volume of Statistics and Applications in Honour of Professor Aloke Dey*, 6, 225-241.
21. Dasgupta, T. & Mandal, A. (2008), "Estimation of process parameters to determine the optimum diagnosis interval for control of defective items", *Technometrics*, 50, 167-181.
22. Johnson, K.; Mandal, A. & Ding, T. (2008) "Software for Implementing the Sequential Elimination of Level Combinations Algorithm", *Journal of Statistical Software*, 25, 1-13.
23. Mandal, A.; Johnson, K.; Wu, C. F. J. & Bornemeier, D. (2007), "Identifying Promising Compounds in Drug Discovery: Genetic Algorithms and Some New Statistical Techniques", *Journal of Chemical Information and Modeling*, 47, 981-988.
24. Mandal, A.; Wu, C. F. J. & Johnson, K. (2006), "SELC: Sequential Elimination of Level Combinations by means of modified Genetic Algorithms", *Technometrics*, 48, 273-283.
25. Mandal, A. & Mukerjee, R. (2005), "Design Efficiency under Model Uncertainty for Nonregular Fractions of General Factorials", *Statistica Sinica*, 15, 697-707.
26. Mandal, A. (2005), "An Approach for Studying Aliasing Relations of Mixed Fractional Factorials Based on Product Arrays", *Stat. & Prob. Letters*, 75, 203-210.
27. Banik, P.; Mandal, A. & Rahaman, S. (2002), "Markov Chain Analysis of Weekly Rainfall Data in Determining Drought-proneness", *Discrete Dynamics in Nature and Society*, 7, 231-239.
28. Mandal, A. & Sengupta, D. (2000), "Fatal accidents in Indian Coal Mines", *Calcutta Statistical Association Bulletin*, 50, 95-120.

BOOK REVIEW

29. Mandal, A. (2008), Matrix Algebra: Theory, Computations, and Applications in Statistics by James E. Gentle, *Journal of the American Statistical Association*, 103, 1716-1717.

PATENTS - FILED

Sharma, S., Jones, A. & Mandal, A., (Filing date: 2016, March 30; Application number US 15/085,377). *US20160289449 A1, Protein-based bioplastics and methods of use.*

WORKS SUBMITTED BUT NOT YET ACCEPTED - UNDER REVISION

30. Lukemire, J.; Mandal, A. & Wong, W. K. (2017), "*d*-QPSO: A quantum particle swarm technique for finding *D*-Optimal designs for models with mixed factors and a binary response", under revision for *Technometrics*.
31. Kane, A. & Mandal, A. (2017), "A new analysis strategy for designs with complex aliasing", under revision for *The American Statistician*.

WORKS SUBMITTED BUT NOT YET ACCEPTED

32. Chakraborty, A.; Datta, G. & Mandal, A. (2017), “Robust hierarchical Bayes small area estimation for nested error regression model”, submitted to the *Journal of the American Statistical Association - Theory and Methods*.

ANY OTHER – UNDER PREPARATION

33. Jones, A.; Pant, J.; Lee, A.; Goudie, M.; Gruzd, A.; Mandal, A.; Sharma, S. & Handa, H. (2017) “Nitric oxide releasing albumin based plastic and its antibacterial properties”, to be submitted to the *International Journal of Polymeric Materials and Polymeric Biomaterials*.
34. Bhattacharjee, N.; Ranjan, P.; Mandal, A. & Tollner, E. W. (2017) “Inverse modeling and uncertainty analysis for rainfall-runoff models using history matching approach”, to be submitted to the *Journal of Environmental Management*.

ANY OTHER – UNPUBLISHED

35. Bargo, A. M.; Mandal, A.; Seymour, L.; McDowell, J. & Lazar, N. A., “Social Network Models for Identifying Active Brain Regions from fMRI Data”.
36. Chakraborty, A.; Mandal, A. & Johnson, K., “In Search of Desirable Compounds”.

GRANTS

- “Comparison of Oconee and Ocmulgee river basins for sustainable ecosystem and economic development of Middle Georgia” – Georgia Institute of Technology (March 1, 2016 – Feb 28, 2017, Co-PI, \$18000)
- “Water supply and its potential impact on economic development along the Macon-Hawkinsville reach of the Ocmulgee River” – Georgia Institute of Technology (March 1, 2015 – Feb 29, 2016, Co-PI, \$17250)
- “Optimal Design of Experiments for Binary Response” – National Security Agency H98230-13-1-0251. (single PI, May 08, 2013 – May 7, 2015, \$40000)
- Conference Grant: Co-PI: “Design and Analysis of Experiments 2012” – National Security Agency, \$14670
- Conference Grant: Co-PI: “Design and Analysis of Experiments 2012” – National Science Foundation, \$20000
- “Optimal Design of Experiments for Binary Response” – summer research grant provided by the University of Georgia Provost’s Office. (July 01, 2012 – July 31, 2012, \$5000)
- “G-SELC: A New Global Optimization Technique Using Genetic Algorithms, Tabu Search and Gaussian Processes” – National Science Foundation DMS-0905731. (single PI, July 1, 2009 – June 30, 2012, \$100,000).
- “SELC: An Optimization Technique Motivated by Modified Genetic Algorithms” – faculty research grant provided by the University of Georgia Research Foundation. (Jan 03, 2006 – Dec 31, 2006, \$8000)

STUDENT SUPERVISION

Ph.D. Students:

Adrijo Chakraborty (2014)
Ming-Hung (Jason) Kao (2009)
Wei Zhang (current)

M.S. Students:

Padmanand Madhavan Nambiar (2015)

Tan Ding (2006)
Natalia Shim (current)
Tae-young Pak (current)

Served in addition as committee member for 8 M.S. students and 9 Ph.D. students.

AWARDS AND HONORS

Franklin College Outstanding Academic Advising Award (2015), University of Georgia.
Sarah H. Moss Fellowship (2013), University of Georgia.
Sarah H. Moss Fellowship (2011), University of Georgia.
IMS Laha Travel Award (2005), Joint Statistical Meetings/IMS Annual Meeting.
Mary G. Natrella Scholarship (2005), Quality and Productivity Research Conference, Minneapolis, MN.
SRC Student Scholarship (2005), Spring Research Conference, at Park City, Utah.
The QSR Best Student Paper Award (2004), INFORMS National Meeting in Denver.
Invited to attend the 2004 Future Academician Colloquium in Denver, CO, preceding the INFORMS National Meeting.
Team Champion in the ASA Stat Bowl at the 2004 Joint Statistical Meetings (JSM) in Toronto.
Best Student Research Paper Award in Theoretical Statistics (2004), Fifth Biennial International Conference on Statistics, Probability and Related Areas organized by International Indian Statistical Association, (Athens, Georgia).
John Morris Fellowship, Georgia Institute of Technology (2003).
Outstanding first year PhD Student Award, Department of Statistics, University of Michigan (2002). Only two students got the award for that year.
Scholarship and Certificate of Merit in National Talent Search Examination, 1994 conducted by National Council of Educational Research and Training (NCERT), India.
3rd in West Bengal(1993) and 2nd in West Bengal(1994) in Science Talent Search Exam conducted by National Science Society affiliated to Indian Science Congress.
Rank 13 (out of 450,000 students) in West Bengal in Secondary Examination (1994) and Rank 23 (out of 350,000 students) in West Bengal in Higher Secondary Examination (1996).

TEACHING EXPERIENCE

Taught the following courses at the University of Georgia since 2005:

Stat 6210 - Statistical Methods I, Spring 2006, Spring 2007, Spring 2008, Spring 2012, Spring 2013
Stat 6800 - Tools for Statistical Theory, Fall 2007, Fall 2008, Fall 2009
Stat 6320 - Statistical Analysis II, Fall 2005, Fall 2006
Stat 6420 - Applied Linear Models, Fall 2007, Fall 2008, Fall 2009, Fall 2010, Fall 2015
Stat 4220 - Applied Experimental Designs, Spring 2010, Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2014, Spring 2014, Spring 2015, Spring 2016, Maymester 2016, Spring 2017
Stat 6430 - Design and Analysis of Experiments, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017
Stat 6360 - Statistical Software Programming, Maymester 2012, Maymester 2013

Taught the following course at the Georgia Institute of Technology in 2004:

ISyE 6413 - Design and Analysis of Experiments, Fall 2004

Taught the following course at the University of Michigan since 2001:

Stat 350 - Introductory Statistics, Graduate Student Instructor, Fall 2001, Winter 2002

PRESENTATIONS

INVITED

1. Small Area Estimation with Mixture of Random Effects, Department Of Biostatistics And Bioinformatics, Emory University, March 2017.
2. Small Area Estimation with Mixture of Random Effects, Platinum Jubilee International Conference on Applications of Statistics, University of Calcutta, December 2016.
3. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Department of Mathematics and Statistics, Indian Institutes of Science Education and Research, Kolkata, India, December 2016.
4. Small Area Estimation with Uncertain Random Effects, School of Mathematics and Statistical Sciences, Arizona State University, October 2016.
5. Optimal Design of Experiments for Generalized Linear Models, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, October 2016.
6. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Department of Computer Science and Engineering, P.E.S. Institute of Technology - South Campus, Bangalore, India, September 2016.
7. Optimal Design of Experiments for Generalized Linear Models, Spring Research Conference, Chicago, IL, May 2016.
8. Optimal Design of Experiments for Generalized Linear Models, International Conference on Design of Experiments, Memphis, TN, May 2016.
9. Optimal Design of Experiments for Generalized Linear Models, R.C. Bose Memorial Session, Eighth Triennial International Symposium on Probability and Statistics organized by Calcutta Statistical Association jointly with the Department of Statistics, University of Calcutta, December 2015.
10. Optimal Design of Experiments for Generalized Linear Models, INFORMS Annual Meeting, Philadelphia, November 2015.
11. Optimal Design of Experiments for Generalized Linear Models, Department of Statistics, University of California at Davis, May 2015.
12. D-optimal designs with ordered categorical data, Design and Analysis of Experiments 2015, Cary, NC, March 2015.
13. Optimal Designs for Two Level Factorial Experiments With Binary Response, Statistics and Mathematics Unit, Indian Statistical Institute, Kolkata, India, December 2014.
14. Small Area Estimation with Uncertain Random Effects, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, August 2014.
15. Small Area Estimation with Uncertain Random Effects, Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data: A Conference Honoring Professor Malay Ghosh, College Park, MD, May 2014.
16. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Department of Biostatistics, University of Minnesota, May 2014.
17. Optimal Designs for Two Level Factorial Experiments With Binary Response, Fourth International Workshop in Sequential Methodologies, University of Georgia, July 2013.
18. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, The 2nd Workshop on Biostatistics and Bioinformatics: Celebrating the International Year of Statistics, Georgia State University, Atlanta, GA, May 2013.
19. Optimal Designs for Two Level Factorial Experiments With Binary Response, Eighth Triennial International Symposium on Probability and Statistics organized by Calcutta Statistical Association jointly with the Department of Statistics, University of Calcutta, December 2012.

20. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Department of Statistics, University of California at Davis, November 2012.
21. Optimal Designs for Two Level Factorial Experiments With Binary Response, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, October 2012.
22. Optimal Designs for Two Level Factorial Experiments With Binary Response, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA, September 2012.
23. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, IMS/ASA Spring Research Conference 2012, Harvard University, June 2012.
24. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, March 2012.
25. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Contemporary Issues and Applications of Statistics, Indian Statistical Institute, Kolkata, India, January 2012.
26. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Department of Mathematics and Statistics, University of Maryland, Baltimore County, September 2011.
27. Optimal Designs for Two Level Factorial Experiments With Binary Response, Statistical Society of Canada Annual Meeting, Wolfville, Canada, June, 2011.
28. Constrained Multi-objective Designs for Functional MRI Experiments via A Modified NSGA-II, International Conference on Design of Experiments, Memphis, TN, May 2011.
29. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Design and Analysis of Experiments in Modern-day Science and Technology, The Radcliffe Institute for Advanced Study at Harvard University, Cambridge, MA, March 2011.
30. Optimal Designs for Two Level Factorial Experiments With Binary Response, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, February, 2011.
31. Multi-objective Optimal Designs and Social Network Models for Identifying Active Brain Regions in Event-Related fMRI Studies, Applied Statistics Unit, Indian Statistical Institute, Calcutta, India, December 2010.
32. Estimation of Process Parameters to Determine the Optimum Diagnosis Interval for Control of Defective Items, Department of Mathematics and System Analysis, Aalto University, Finland, November 2010.
33. Optimal Designs for Two Level Factorial Experiments With Binary Response, INFORMS Annual Meeting, Austin, November 2010.
34. Multi-objective Optimal Designs and Social Network Models for Identifying Active Brain Regions in Event-Related fMRI Studies, Division of Biostatistics and Epidemiology. Medical University of South Carolina, Charleston, SC, September, 2010.
35. Social Network Models for Identifying Active Brain Regions from fMRI Data, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, April, 2010.
36. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Advances in Statistical Science - International Conference in Celebration of 90th Birth Anniversary of Professor C.R. Rao, Calcutta, January 2010.
37. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Seventh Triennial International Symposium on Probability and Statistics organized by Calcutta Statistical Association jointly with the Department of Statistics, University of Calcutta, December 2009.
38. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, INFORMS Annual Meeting, San Diego, October 2009.

39. *G-SELC: Optimization by Sequential Elimination of Level Combinations Using Genetic Algorithm and Gaussian Processes*, Joint Statistical Meeting, Washington DC, August, 2009.
40. *G-SELC: Optimization by Sequential Elimination of Level Combinations Using Genetic Algorithm and Gaussian Processes*, Spring Research Conference On Statistics in Industry and Technology, Vancouver, Canada, June 2009.
41. *Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies*, Department of Statistics and Biostatistics, Rutgers University, March, 2009.
42. *Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies*, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, February, 2009.
43. *G-SELC: Optimization by Sequential Elimination of Level Combinations Using Genetic Algorithm and Gaussian Processes*, Department of Biomedical Engineering and Computational Sciences, Helsinki University of Technology, November 2008.
44. *Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies*, Department of Mathematics and Statistics, University of Helsinki, November, 2008.
45. *G-SELC: Optimization by Sequential Elimination of Level Combinations Using Genetic Algorithm and Gaussian Processes*, School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA, October 2008.
46. *G-SELC: Optimization by Sequential Elimination of Level Combinations Using Genetic Algorithm and Gaussian Processes*, International Conference on Interdisciplinary Mathematical and Statistical Techniques, University of Memphis, May, 2008.
47. *Estimation of process parameters to determine the optimum diagnosis interval for control of defective items*, Indian Statistical Institute, Kolkata, December, 2007.
48. *Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies*, University of Clemson, November 2007.
49. *Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies*, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, October 2007.
50. *Design Efficiency under Model Uncertainty for Nonregular Fractions of General Factorials*, Sixth Triennial International Symposium on Probability and Statistics organized by Calcutta Statistical Association jointly with the Department of Statistics, University of Calcutta, December 2006.
51. *Estimation of Process Parameters to Determine the Optimum Diagnosis Interval for Control of Defective Items*, NISS Affiliates & NISS/SAMSI University Affiliates 2006 Annual Meeting
52. *SELC: Sequential Elimination of Level Combinations by means of modified Genetic Algorithms*, University of Clemson, December 2005.
53. *SELC: Sequential Elimination of Level Combinations by means of modified Genetic Algorithms*, Spring Research Conference, Park City, Utah, June 2005.
54. *SELC: Sequential Elimination of Level Combinations by means of modified Genetic Algorithms*, Fifth Biennial International Conference on Statistics, Probability and Related Areas organized by IISA, May 2004.

CONTRIBUTED

55. *G-SELC: Optimization by Sequential Elimination of Level Combinations Using Genetic Algorithm and Gaussian Processes*, Spring Research Conference, Georgia Institute of Technology, Atlanta, GA, May 2008.

56. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, International Conference on Statistical Paradigms: Recent Advances and Reconciliations, Indian Statistical Institute, Kolkata, January, 2008.
57. Multi-objective Optimal Experimental Designs for Event-Related fMRI Studies, Design and Analysis of Experiments (DAE), University of Memphis, Octoberber 2007.
58. Estimation of process parameters to determine the optimum diagnosis interval for control of defective items, Joint Research Conference, June, 2006.
59. Estimation of process parameters to determine the optimum diagnosis interval for control of defective items, Joint Statistical Meeting, August, 2006.
60. Sequential Elimination of Level Combinations by means of modified Genetic Algorithms, 28Th Annual Midwest Biopharmaceutical Statistics Workshop, Muncie, IN, May 2005.
61. Sequential Elimination of Level Combinations by means of modified Genetic Algorithms, 2005 Quality and Productivity Research Conference , Minneapolis, MN, May 2005.
62. Design Efficiency under Model Uncertainty for Nonregular Fractions of General Factorials, Joint Statistical Meeting, August, 2005.
63. SELC : Sequential Elimination of Level Combinations by Means of Modified Genetic Algorithms, INFORMS Denver, October 2004.
64. SELC: Sequential Elimination of Level Combinations by means of modified Genetic Algorithms, Joint Statistical Meeting, August, 2004.
65. Design Efficiency under Model Uncertainty for Nonregular Fractions of General Factorials, Fifth Biennial International Conference on Statistics, Probability and Related Areas organized by IISA, May 2004.
66. Multivariate Liquid Association with Application to Drug Optimization, INFORMS Atlanta, October, 2003.
67. Sequential Elimination of Levels in Design of Experiments Using Genetic Algorithms, INFORMS Atlanta, October, 2003.
68. Bayesian Designs for Factor Screening and Response Surface Exploration, Joint Statistical Meeting, August, 2003.
69. Optimal Designs for Model Selection, Pfizer Global Research and Development, December, 2002.

PROFESSIONAL ACTIVITIES

Co-Organizer, Georgia Statistics Day Conference 2015, Athens, GA, October, 2015.
 Local Organizing Committee member, Fourth International Workshop in Sequential Methodologies (IWSM2013), Athens, GA, July, 2013.
 Co-Organizer, Design and Analysis of Experiments Conference 2012, Athens, GA, October, 2012.

Served on the DMREF Math Panel of National Science Foundation, Arlington, VA, June 2015.
 Wrote a Promotion evaluation Letter.

Served as a member of the IT/Multimedia Scientific Area Committee within the Organization of Scientific Area Committees (OSAC) of National Institute of Standards and Technology.

Steering Committee member, Georgia Statistics Day Conference 2016, Georgia Institute of Technology, GA, October, 2016.
 Scientific Program Committee, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, September 2016.
 Scientific Program Committee, International Conference on Design of Experiments, Memphis, TN, May 2016.

Local organizer, NISS/SAMSI University Affiliates Annual Meeting, April, 2006.

Session Organizer and Chair, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, September 2016.

Session Organizer, International Chinese Statistical Association (ICSA) Applied Statistical Symposium, Atlanta, GA, June 2016.

Session Organizer and Chair, Spring Research Conference, Chicago, IL, May 2016.

Session Organizer, International Conference on Design of Experiments, Memphis, TN, May 2016.

Session Organizer, International Statistics Conference: Statistics and Society in the New Information Age, Colombo, Sri Lanka, December 2014.

Session Organizer, International Symposium on Business and Industrial Statistics, Durham, NC, June 2014.

Session Organizer, Statistical Society of Canada Annual Meeting, Wolfville, Canada, June, 2011.

Session Organizer, International Conference on Design of Experiments, Memphis, TN, May, 2011.

Session Chair, IMS/ASA Spring Research Conference 2012, Harvard University, June 2012.

Session Chair, International Conference on Design of Experiments, Memphis, TN, May, 2011.

Session Chair, Joint Statistical Meeting, Washington DC, August, 2009.

Session Organizer and Chair, Spring Research Conference On Statistics in Industry and Technology, Vancouver, Canada, June 2009.

Session Chair, Symposium on New Directions in Asymptotic Statistics, Athens, May, 2009.

Session Chair, Spring Research Conference, Atlanta, May, 2008.

Session Chair, INFORMS Atlanta, October, 2003.

Refereed grant proposals of National Science Foundation and National Security Agency.

Reviewer of Journal of American Statistical Association (2),

Annals of Applied Statistics (2),

Journal of the Royal Statistical Society - Series C (4),

Technometrics (7),

Statistica Sinica (5),

Biometrics,

Canadian Journal of Statistics (3),

Journal of Multivariate Analysis,

Scandinavian Journal of Statistics,

Statistics and Probability Letters (8),

Journal of Statistical Planning and Inference (7),

Journal of Quality Technology,

The American Statistician,

Operations Research,

Journal of Statistical Theory and Practice (2),

Journal of the Korean Statistical Society,

Computational Statistics and Data Analysis (5),

Journal of Statistical Software,

Communications in Statistics – Theory and Methods,

Journal of Applied Statistics,

Statistics and Computing,

Journal of Indian Society of Agricultural Statistics,

Journal of Agricultural, Biological, and Environmental Statistics,

Statistics in Medicine (4),

IIE Transactions (2),

IIE Transactions (1),

PLoS ONE,

IEEE Transactions on Automation,

IIE Transactions on Quality and Reliability Engineering,

Naval Research Logistics,
Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery,
Computers and Industrial Engineering (3),
Punjab University Journal of Mathematics,
Pakistan Journal of Science,
Chemometrics and Intelligent Laboratory Systems (2),
Journal of Chemical Information and Modeling.

PROFESSIONAL MEMBERSHIPS

American Statistical Association
Elected Member of International Statistical Institute