

Bhaskar Bhattacharya

Department of Statistics
University of Nebraska-Lincoln

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EDUCATION

Ph.D., Statistics, University of Iowa, 1993

Dissertation title: Estimation and hypothesis testing based on I-projections under linear inequality constraints

M.S., Statistics, Mathematics, Indian Statistical Institute, Calcutta, India, 1986

Thesis title: A statistical analysis of chemical composition of human hair and its connection to diseases

B.S., Statistics, Mathematics, Economics, Indian Statistical Institute, Calcutta, India, 1984

PROFESSIONAL APPOINTMENTS

- **University of Nebraska-Lincoln (2024 - current)**
2024 – current **Head**, Department of Statistics
2024 – current **Professor**, Department of Statistics
- **American Statistical Association St. Louis Chapter**
2025 - **President**
2024 - **Vice-President**
- **Southern Illinois University**
2020-2021 **Director**, School of Mathematical and Statistical Sciences (SMSS)
2015-2020 **Chair**, Department of Mathematics

2006-2024 **Professor**, Department of Mathematics/SMSS.
1998-2008 **Associate Professor**, Department of Mathematics.
1999-2000 **Visiting Scientist**, Indian Statistical Institute.
1993-1998 **Assistant Professor**, Department of Mathematics.
- **University of Iowa**
1992-1993 **Teaching Assistant**, Department of Management Sciences.
1986-1992 **Teaching/Research Assistant**, Dept. of Statistics /Actuarial Sc.

Committees Served:

A. UNL - Leadership Council, Institute of Agriculture and Natural Resources
Unit heads and Vice Chancellors met discussing current affairs

UNL - Statewide Education K-12 Pathways Discussion Group

Discussed how to improve the connection between schools and UNL to improve education at schools and enrollment at UNL; Made several trips to high schools and community colleges throughout the state

UNL – Academic-industry partnership development

Lead organizer of hackathon 2025 – for all graduate and undergraduate students

B. SIU Departmental Committees:

1. Engineering and Science Liaison Committee
2. Personnel Committee – elected
3. Undergraduate Programs Committee
4. Graduate Programs Committee
5. Planning Committee
6. Promotion and Tenure Committee – elected
7. Statistics Search Committee
8. Ph.D. qualifying exam committee
9. Ph.D. preliminary exam committee
10. Undergraduate advising
11. Math Field Day Examination Committee
12. Textbook Selection Committees
13. Telephone campaign for John M. H. Olmsted Memorial fund

B. SIU College Committees

1. College of Science Curriculum Committee
2. College of Science Promotion and Tenure Committee
3. College of Science Policy Committee
4. College of Science Scholar Excellence Selection Committee
5. College of Science, Department of Physics, Promotion and Tenure Committee (2015 - associate to full, 2019 - assistant to associate)

C. SIU University Committees

1. University level Teaching Excellence Award (2024)
2. Dean Search Committee for College of Science (2013-14)
3. Task Force for the Institute of Statistics and Methodology (2013)
4. University Core Curriculum Committee (2015-2020)
5. Supply Chain Management (College of Business) degree program Committee (2015-16)
6. Develop a Revised Operating Paper for the Graduate School (2020)

SPONSORED RESEARCH

1. **National Science Foundation / American Mathematical Society**, Travel Grant to participate in the International Congress of Mathematicians in Saint Petersburg, Russia, 2022 (\$3,500, the money was not used because the meeting was changed to virtual format due to unrest in the region).
2. **National Science Foundation** Research grant, DMS- 1007528: Constrained Statistical Inference and Information Theory, 2010 – 2015 (\$100,000)

3. **National Science Foundation** Research grant, DMS-0706041: Statistics and Information Theory, 2007 – 2010 (\$118,213)
4. **NSF/CBMS** travel grant to the summer conference on ‘Bayesian Statistics’, 1994 (\$700)
5. SIU Foundation Grant 2019, “Math-Stat Labs”, \$10,000
6. Summer Research Fellowship Award, Southern Illinois University, 1996 (one-month salary)
7. Sabbatical Extension Award, Southern Illinois University, 1999 (one-month salary)

SPONSORED CONFERENCE

1. **National Security Agency** conference grant, Langenhop Lecture and SIU Mathematics Conference in *Statistics and Probability*” 2020- 2022 (PI - \$9,000).
2. **National Security Agency** conference grant, Langenhop Lecture and SIU Mathematics Conference in *pure mathematics*”, 2018-2019 (PI - \$7,500).

Teaching Grants

1. NCLB/IBHE K-12 Teacher Enhancement Project, IBHE, \$752,665, April-August, 2017. (worked as *Key Personnel* with PIs M. Komarraju and M. Keefer, awarded faculty salaries for 5 online math course developments)

Recent Unfunded Grant Applications

- “Integrated Minor Program for Advancing Computational Training for STEM Majors (IMPACT-STEM)”, 2020-2024, co-PI, \$1,000,000, **NSF S-STEM** (jointly with computer science, physics, chemistry).
- “Lowering Barriers to Entry in Mathematics”, Co-PI, \$1,000,000, 8/16/18-8/15/23, **NSF S-STEM**, 2017-2021.
- “Information Theoretic Developments of IRT and ANOVA models in Statistics”, PI - \$42,000, 9/1/17-8/31/22, **Simon Foundation**, 2017
- “Information Theoretic development of Item Response Theory Models”, 7/1/17-6/30/20, PI - \$191,840, **NSF**, 2016.
- “Little Egypt Graduate Mathematics And Statistics Conference”, PI - \$15,000, 5/27/17 – one day conference, **NSA**, 2015.
- “A semiparametric approach to statistical analysis using information theory”, PI, \$175,638, 6/1/16-5/31/18, **NSA**, 2014.

AWARDS AND HONORS

1. Henry Rietz Award, statistics (best performance in Ph.D. qualifying exam), U. of Iowa, 1988.
2. Best Teaching Assistant award nomination, statistics, University of Iowa, 1991.
3. National Merit Scholarship, Government of India, 1979.

EDITORIAL APPOINTMENT

- (i) Associate Editor of **Sankhya, Series B (2009-2012)**.
- (ii) Associate Editor of **Far East Journal of Theoretical Statistics (2010-2018)**.

RESEARCH INTERESTS

Constrained statistical inference, information theoretic methods in statistics, statistical applications and methodology

PUBLICATIONS (All peer-reviewed)

35. Ahammed, M. and Bhattacharya, B. “Constrained inference in scaled mixed effects models with applications to London junior school project data”, *Journal of Statistical Research*, 57, 1-2, 81-94, 2022 (published in 2024).
34. Pathiravasan, C. and Bhattacharya, B., “A Semiparametric Tilt Optimality Model”, *Stats*, 6, 1-16, 2023.
33. Bhattacharya, B. and M. Al-Talib, “A Minimum Relative Entropy based Correlation Model between the Response and Covariates”, *Journal of the Royal Statistics Society – Series B*, 79, 1095-1118, 2017.
32. Peiris, T. B., and Bhattacharya, B. “Constrained Inference in Linear Regression”, *Journal of Multivariate Analysis*, 151, 133-150, 2016.
31. Yi, H. and Bhattacharya, B. “Constrained Inference when the Sampled and Target Populations Differ”, *Entropy*, 18, 1-10, 2016.
30. Bhattacharya, B. and Hughes, G., “On Shape Properties of the Receiver Operating Characteristic Curve”, *Statistics and Probability Letters*, 103, 73-79, 2015.
29. Hughes, G. and Bhattacharya, B., “Symmetry Properties of Bi-Normal and Bi-Gamma Receiver Operating Characteristic Curves are Described by Kullback-Leibler Divergences”, *Entropy*, 15, 1342-1356, 2013.
28. Bhattacharya, B., “Covariance Selection and Multivariate Dependence”, *Journal of Multivariate Analysis*, 106, 212–228, 2012.
27. Bhattacharya, B. and Hughes, G., Symmetry of receiver operating characteristic curves and Kullback-Leibler divergences between the signal and noise populations, *Journal of Mathematical Psychology*, 55, 365-367, 2011.
26. Choudhary, R., Bandla, S., Watson, D.G., Haddock, J., Abughazaleh, A. and Bhattacharya, B., “Performance of coiled tube ultraviolet reactors to inactivate *Escherichia coli* W1485 and *Bacillus cereus* endospores in raw cow milk and commercially processed skimmed cow milk, *Journal of Food Engineering*, 107, 14-20, 2011.
25. Ye, P. and Bhattacharya, B., “Tests of Symmetry with One-sided Alternatives in Three-way Contingency Tables”, *Statistical Papers*, vol 52, 33-51, 2011.
24. Bhattacharya, B., “Relative Entropy Measures of Asymmetry with Applications”, *Sankhya – series B*, 71, 97-122, 2009.

23. Bhattacharya, B., "Optimal Use of Historical Information", *Journal of Statistical Planning and Inference*, 139, 4051-4063, 2009.
22. Bhattacharya, B. and Gregory, J., "A General Maximum Entropy Theory: Constraint Optimization in Probability", *Journal of Computational Mathematics and Optimization*, 4, No. 1, 15 – 29, 2008.
21. Bhattacharya, B., "Testing for ordered failure rates under general progressive censoring", *Journal of Statistical Planning and Inference*, 137, 1775 – 1786, 2007.
20. Bhattacharya, B., "Maximum entropy characterization for the multivariate Louisville distribution", *Journal of Multivariate Analysis*, 97, 1272 – 1283, 2006.
19. Bhattacharya, B., "An Iterative Procedure for General Probability Measures to obtain I-Projection onto Intersection of Convex Sets", *Annals of Statistics*, 34, 878 – 902, 2006.
18. Bhattacharya, B., "Disparity based goodness-of-fit tests for and against isotonic order restrictions for multinomial models", *Journal of Nonparametric Statistics*, 15, no. 1, 1 – 10, 2003.
17. Bhattacharya, B. and Habtzghi, D., "Median of the p-value under the alternative hypothesis", *The American Statistician*, 56, no. 3, 202-206, 2002.
16. Bhattacharya, B., "Tests of parameters of gamma distributions with inequality restrictions", *Annals of the Institute of Statistical Mathematics*, 54, no. 3, 565-576, 2002.
15. Bhattacharya, B., "Csiszar divergence from constant failure rate model for grouped data", *Communications in Statistics – Theory & Methods*, 30, no. 6, 1131-1141, 2001.
14. Bhattacharya, B., "Testing homogeneity of scale parameters against restricted alternatives for gamma distributions with unknown common shape parameter", *Journal of Statistical Computation and Simulation*, 69, no. 4, 353-368, 2001.
13. Bhattacharya, B., "Measures of departure from constant failure rate models and measures of departure from proportional hazards rate models for discrete data", *Biometrical Journal*, 41, 2, 187-196, 1999.
12. Bhattacharya, B. and Sarkar, S., "Negative exponential disparity based robust estimates of ordered means in normal models", *Korean Journal of Communications in Statistics*, vol 7, no 2, 371-383, 2000.
11. Bhattacharya, B., "Testing conditional symmetry against one-sided alternatives in square contingency tables", *Metrika*, 47, 71-84, 1998.
10. Bhattacharya, B., "Testing multinomial parameters under order restrictions", *Communication in Statistics - Theory and Methods* 26, no. 8, 1839 -1865, 1997.
9. Bhattacharya, B., "On testing symmetry versus one-sided alternatives", *Annals of the Institute of Statistical Mathematics* 49, no. 2, 237 - 254, 1997.

8. Bhattacharya, B. and Dykstra, R. L., "A Fenchel duality aspect of iterative I-projection procedures", *Annals of the Institute of Statistical Mathematics* 49, no. 3, 435 - 446, 1997.
7. Bhattacharya, B., "On testing homogeneity with a one-sided alternative in the analysis of variance", *Sankhya (A)* 59, Pt. 2, 198-214, 1997.
8. Bhattacharya, B., "Tests of bivariate symmetry with a one-sided alternative in the analysis of variance", *Biometrical Journal* 38, 791-808, 1996.
5. Bhattacharya, B. and Nandram, B., "Bayesian inference for multinomial populations under stochastic ordering", *Journal of Statistical Computation and Simulation* 54, 145-163, 1996.
4. Bhattacharya, B. and Basu, A., "Robust estimates of ordered means in normal models", *Journal of Statistical Computation and Simulation* 54, 165-175, 1996.
3. Bhattacharya, B., "Restricted tests for and against the increasing failure rate ordering on multinomial parameters", *Statistics and Probability Letters* 25, 309-316, 1995.
2. Bhattacharya, B. and Dykstra, R. L., "A general duality approach to I-projections", *Journal of Statistical Planning and Inference* 3, 203-216, 1995.
1. Bhattacharya, B. and Dykstra, R. L., "Statistical inference for stochastic ordering", in *Stochastic Orders and Their Applications* by M. Shaked, J. Shantikumar and Collaborators, Academic Press, 221-249, 1994.

PAPERS UNDER REVIEW

1. "Misspecification of dependence in constrained statistical inference".

TEACHING EXPERIENCE

UNL: Alpha Seminar (Fall 2025), a course teaching graduate students about internship/job prospects

SIU: Have taught numerous statistics courses at the graduate and undergraduate levels:

Theoretical Statistics, linear Models, Order Restricted Statistical Inference, Mathematical Statistics for Engineers, Applied Multivariate Analysis, Applied Nonparametric Statistics, Applied Linear Statistical Models, Applied Bayesian Data Analysis, Design of Experiments, Introduction to Categorical data Analysis, Basic Statistics, Business Statistics, Statistical Analysis, Statistics and Society, Basics of Data Science.

SIU: Have taught numerous mathematics courses at the undergraduate level:

College algebra, Calculus, Finite Mathematics Contemporary Mathematics.

SIU: Have served as teaching assistant in several graduate and undergraduate level statistics courses at the University of Iowa.

STUDENT ADVISING

Ph.D. students (graduated): (Most have published papers independently since graduation)

1. Ping Ye (August, 2008), *Tests of symmetry versus one-sided alternatives in three-dimensional tables*. Ping was employed as a tenure-track assistant professor at Quincy University, and received tenure there in 2012. Recently she moved to University of North Georgia Gainesville and has been promoted to a tenured associate professor.

2. Dharsana Arachchi. (December, 2010), *Order restricted estimation and testing for fit in RC models*. Suresh received a tenure-track job at Bluefield State College in West Virginia, and has now been promoted to tenured full Professor.

3. Huijun Yi (May, 2014), *Constrained Inference when target and sampled populations differ*. Huijun received a tenure-track assistant professor position at the Troy State University, AL. She is developing the statistics program there. She has been promoted to a tenured associate professor.

4. Mohammad Al-Talib (May, 2014), *A model using correlations between variables*. Mohammad joined as an assistant professor at the Yarmouk University in Irbid, Jordan. He has been promoted to a tenured associate professor.

5. Thelge Buddika Peiris (August, 2014), *Constrained statistical inference in linear regression*. Buddika has been promoted to a tenured associate teaching professor at Worcester Polytechnic Institute.

6. Naama Lewis (December, 2019), *Item response theory models through information theory*. Naama is an assistant professor of statistics at Marian University in Indiana.

7. Chaturangi Pathiravasan (August, 2019), *Analysis of variance models through information theory*. Chaturangi worked as post-doc at Department of Biostatistics, School of Public Health, Boston University for two years. Then she joined the John Hopkins University Bloomberg School of Public Health as assistant scientist.

8. Mostak Ahamad (Aug 2023), *Constrained Inference in Scaled Mixed Effects Models with Applications to London Junior School Project Data*. Mostak is a visiting assistant professor at Grand Valley State University

9. Afnan Almazmomi (Aug 2023), *Effect of mis-specified covariance matrix on constrained hypotheses tests for two-stage samples*. Afnan is an assistant professor at Taibah University at Saudi Arabia

Post-doctoral student

Suju, Yin, Associate Professor, College of Applied Sciences, Beijing University of Technology, China; 2014 - 2015

Faculty Mentoring Drs. Abdel Mugdadi, Yaser Samadi

M.S. students (graduated):

1. George Matiri (December, 1998), *Testing scale parameters of m independent gamma distributions*.

2. Mike Hodge (May, 2000), *Applied Multivariate Analysis*.

3. Zhang Hui (August, 2001), *Robustness of a test procedure for the scale parameters of several Gamma populations*
4. Desale Habtzghi (August, 2001), *Using median of p-value for testing*
5. Casey Wheeler (May, 2003), *Statistical test for the homogeneity of scale parameters of independent gamma distributions using Shannon's entropy function*
6. Yongxing Li (August, 2003), *A study of p-values in presence of nuisance parameters.*
7. Mohua Dasgupta (December, 2003), *Discrimination and classification with multivariate distributions.*
8. A. Suresh (December, 2005), *Bayesian hypothesis testing.*
9. Buddika Peiris (August, 2010), A research paper on pitfalls in order- restricted inferences in linear regression and meta analysis.
10. Rasanji Rathnayake (December, 2010), Bayesian Inference.
11. Patrick B. Soule (December, 2017), Predicting student success – a logistic regression analysis of data from multiple SIU courses

Member of the Master's Thesis or Ph.D. Dissertation Committee (of which I am not chair):

More than 50 students from mathematics, statistics, science, engineering and education.

External examiner for Ph.D. Dissertation

1. Katelyn Alexandria Davis, Department of Mathematics and Statistics, Carleton University, Ontario, Canada.

PAPER PRESENTATIONS/PARTICIPATIONS

INVITED

1. "Misspecification of dependence in constrained statistical inference", SIU, Carbondale, February, 2023.
2. "Constrained inference in linear mixed models", LLMC-2022, Carbondale, IL, 2022 (student - Mostak Ahmad).
3. "A semiparametric tilt optimality model", Department of Mathematics, University of Louisville, KY, 2019. (student - Chathurangi Pathiravasan)
4. "Developing item response theory models using information theoretic ideas", Department of Mathematics, Marian University, IN (Student - Naama Lewis)

5. "A Model based on Correlations between the Response and the Covariates", IASSL 2014 International Conference at Colombo, Sri Lanka, 28-30 December, 2014.
6. "Variable selection under Dependence", American Mathematical Society 2012 Spring Central Section Meeting #1081, University of Kansas, Lawrence, Kansas, March 30 – April 1, 2012.
7. "The Order-Restricted Homogeneous RC Model for Ordered Contingency Tables: Estimation and Testing for Fit", 2011 IISA conference on Probability, Statistics, and Data Analysis, Raleigh, NC, USA, April 21-24, 2011.
8. "Covariance Selection and Multivariate Dependence", International Conference on Frontiers of Interface Between Statistics and Sciences, in honor of Professor C. R. Rao's 90th (a living legend in statistics) birthday, Hyderabad, India, 30 December, 2009 – 2 January 2010.
9. "Optimal use of historical information", the International Conference on Statistical Paradigms: Recent Advances and Reconciliations 2008, held at the Indian Statistical Institute, Calcutta, India on 1 - 4 January, 2008.
10. "I-projections on convex sets", Spring 2006 meeting of the Louisiana Chapter of the American Statistical Association, University of Louisiana, Lafayette, Louisiana, April 7, 2006. (1 hour 30 min)
11. "Tests of Parameters of Several Gamma Distributions with Inequality Restrictions", departmental colloquium talk at University of South Florida, Tampa, FL, June 19, 2003.
12. "Tests of Parameters of Several Gamma Distributions with Inequality Restrictions", Fourth Biennial International Conference on Statistics, International Indian Statistical Association Meeting, Northern Illinois University, Dekalb, Illinois, June 13-15, 2002.
13. "On testing diagonal homogeneity with a one-sided alternative in the analysis of variance", Indian Statistical Institute, Calcutta, India, October, 1999.
14. "On testing equality of scale parameters of several gamma distributions against restricted alternatives", Indian Statistical Institute, Calcutta, India, November, 1999.
15. "On testing diagonal homogeneity with a one-sided alternative in the analysis of variance", International Indian Statistical Association Meeting, McMaster University, Hamilton, Ontario, Canada, October 10-11, 1998.
16. "Tests of symmetry against one-sided alternatives", invited talk, Stat/Math Division, Indian Statistical Institute, Calcutta, India, January, 1997.
17. An invited attendee at the NSF-CBMS regional conference on 'Bayesian methods in finite sampling techniques', University of Connecticut, Storrs, Connecticut, July 10-14, 1994.
18. "Finding I-projection on intersection of convex sets", invited talk, Department of Mathematics, Southern Illinois University at Carbondale, Carbondale, March, 1993.

19. "Finding I-projection on intersection of convex sets", invited talk, Department of Statistics and Actuarial Science, University of Iowa, Iowa City, February, 1992.

ORGANIZED/CHAired A CONFERENCE/SESSION (INVITED)

1. AgStat Conference, June 2026. (scheduled)
2. Indian International Statistical Association (IISA) Conference, in Lincoln, NE, 12-15 June, 2025.
3. Main organizer of the "Langenhop Lecture and SIU Mathematics Conference" (LLMC) in pure, applied and stat/prob for 2016 - . The theme rotates yearly. About 50 – 60 talks with 70 participants each year. See math.siu.edu/llmc for details.
4. Chaired a session "Under Order and Shape Restrictions" at the IASSL 2014 International Conference at Colombo, Sri Lanka, on 30th December, 2014.
5. Organized a session "Order restricted inference" at the 2011 International Conference on Probability, Statistics and Data Analysis (ICPSDA-2011) on April 21-24 2011 at the Department of Statistics (SAS Hall), North Carolina State University, Raleigh, USA, the International Indian Statistical Association (IISA).
6. Chaired a session 'Bioinformatics II' on January 3, 2008, 4:00-5:45pm at the International Conference on Statistical Paradigms: Recent Advances and Reconciliations 2008, held at the Indian Statistical Institute, Calcutta, India on 1 - 4 January, 2008.
7. Chaired a session "Statistical Inference II" on June 16, 7:45am – 9:00am at the Fourth Biennial International Conference on Statistics, International Indian Statistical Association Meeting, Northern Illinois University, Dekalb, Illinois, June 13-15, 2002.

CONTRIBUTED

1. "Constrained Inference in Regression", presented by my student Thelge Buddika Peiris (dissertation topic) at the 2014 International Indian Statistical Association Conference *On Research Innovations in Statistics for Health, Education, Technology, and Society* at Riverside, CA, July, 11-13, 2014.
2. "Relative entropy measures of asymmetry", Joint Statistical Meetings, ASA, Denver, CO, August 3 – 8, 2008.
3. "An Iterative Procedure for General Probability Measures to obtain I-Projections onto Intersections of Convex Sets", Joint Statistical Meetings, ASA, Minneapolis, MN, August 7 – 11, 2005.
4. "Tests of symmetry against one-sided alternatives", IMS/ENAR meeting, Memphis, Tennessee, March 21-23, 1997.

5. "I-projection on intersection of convex sets", American Statistical Association Winter Conference, Louisville, Kentucky, January 21-24, 1992.
6. "An I-divergence test for marginal stochastic ordering", contributed paper, Eugene Lukacs symposium, Bowling Green State University, Bowling Green, Ohio, March 26-28, 1992.

ATTENDED/PARTICIPATED

1. AMS Chairs' workshop, Baltimore, MD, Feb 15, 2019.
2. Gateway Math Alliance Inaugural Meeting, St. Louis University, April 6, 2019.
3. The 5th Rural Cancer Disparities, Washington University at St. Louis Siteman Cancer Center and SIU Springfield Medical Center Partnership Retreat, Aug 24, 2018.
4. The 8th International Conference on Partial least squares and related methods, 26-28 May, 2014, Paris, France.
5. Active participation as a member of the Iowa team at the 'College Bowl' - a statistical quiz organized by Professor W. Robert Stevenson, Iowa State University at the ASA Winter Conference, Louisville, Kentucky, January 3-5, 1992.

Seminar Presentation at SIU:

1. Math Dept Statistics seminars: Fall, 1997; Spring, 1996; Spring, 1994; Fall, 1993.
2. Organized Math Dept Statistics seminars: Fall, 1997; Spring, 1996.

PROFESSIONAL ACTIVITIES

External Reviewer for Promotion and Tenure Evaluation

Worcester Polytechnic Institute, Department of Mathematical Sciences, 2018, 2023 (Assistant to Associate)
 Southern Illinois University Edwardsville, Department of Mathematics and Statistics, 2022 (Assistant to Associate)
 Wichita State University, Department of Mathematics, 2012 (Associate to Full)
 University of Calgary, Dept. of Mathematics & Statistics, 2012 (Assistant to Associate)
 University of South Carolina, Department of Statistics, 2009 (Assistant to Associate)

Refereed for the Journals:

Annals of Statistics
 Journal of the American Statistical Association (multiple)
 Lifetime Data Analysis
 Journal of Statistical Planning and Inference (multiple)
 Journal of Statistical Computation and Simulation
 Journal of Computational Statistics and Data Analysis (multiple)
 Communications in Statistics (multiple)
 Psychometrika
 Annals of the Institute of Statistical Mathematics
 American Statistician (multiple)
 Information Sciences
 Institute of Mathematical Statistics Lecture Notes Series
 Journal of Multivariate Analysis (multiple)
 Journal of Nonparametric Statistics
 Bayesian Analysis

IEEE transactions on reliability
Sankhya – series A
Sankhya – series B (multiple)
Colombian journal of Statistics
IET Generation, Transmission & Distribution
Entropy (multiple)

Refereed proposals for the Grant Organizations:

National Science Foundation (multiple)
Natural Sciences and Engineering Research Council of Canada (multiple)

Reviewer for Mathematical Reviews, American Mathematical Association,
1993 - 2010 (reviewed 22 papers).

Book Reviews (with honorarium):

1. “Design and Analysis of Experiments with R”, by John Lawson, 2015, CRC Press.
2. “Probability and Statistical Inference” by R. V. Hogg and E. A. Tanis (1999), Fifth Edition, Prentice Hall.
3. Class test of three chapters “Elementary Statistics” by M. Pelosi and T. Sandifer (2002), First edition, John Wiley & Sons, Inc.
4. Modern Mathematical Statistics with Applications, by Jay Devore and Ken Berk (2004), Duxbury.

CONSULTING

- a) Detail consulting experience with Professor Ruplal Choudhary, Department of Plant, Soil Science and Agricultural Systems, SIU, on a project to kill bacteria in raw, skim and soy milk using radiation.
- b) Phone consulting with the following corporations:
 - (i) Chris Beltz, Sr. QA Mgr., Ranir Corporation (2000)
 - (ii) Torri Rush, plant engineer, ExxonMobil (2000)
 - (iii) Keith Shockey, GS Metals, Pinckneyville, IL (2000)

Professional Affiliation:

American Statistical Association (member since 1988)
International Indian Statistical Association

COMMUNITY SERVICE

- (i) Organized a session at 2002 Illinois Junior Science and Humanities Symposium (JSHS) (Laboratory visits) on March 25, 2002. Four students and one teacher at area schools attended. This workshop is composed of lectures and hands on experience with statistical data.
- (ii) Faculty advisor of the SIU Table Tennis Club (2008 - 2018).