Date: 05/07/16

ANURADHA ROY

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1. PERSONAL:

U.S. Citizen (naturalized).

2. CURRENT ACADEMIC RANK:

Associate Professor (with tenure).

3. AREAS OF INTEREST:

Multivariate Analysis.

4. EDUCATION:

- Ph.D. 2002, Applied Mathematical Sciences, Oakland University, Rochester, Michigan, USA. **Dissertation Title:** Some Contributions to Discrimination and Classification with Repeated Measures Data with Special Emphasis on Biomedical Applications.
- M.Stat. (M.S.) 1981, Advanced Probability and Mathematical Statistics, Indian Statistical Institute, Calcutta, India.
- B.Sc. (B.S.) 1978, Mathematics (with first class honors), Presidency College, Calcutta University, India.

5. EXPERIENCE:

Associate Professor, Dept. of Management Science and Statistics, The University of Texas at San Antonio, San Antonio, TX, 09/2008 – Present.

Visiting Associate Professor, Departamento de Matematica and Centro de Matematica e Aplicacioes, Faculdade de Ciencias e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal, 09/2013 (10 days).

Visiting Associate Professor, Dept. of Mathematics (Division of Statistics), KTH Royal Institute of Technology, Stockholm, Sweden, 05/2013 – 07/2013 (2 months).

Visiting Associate Professor, Departamento de Matematica and Centro de Matematica e Aplicacioes, Faculdade de Ciencias e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal, 12/2012 (2 weeks).

Visiting Associate Professor, Dept. of Mathematics (Division of Statistics), KTH Royal Institute of Technology, Stockholm, Sweden, 08/2012 (1 month).

Assistant Professor, Dept. of Management Science and Statistics, The University of Texas at San Antonio, San Antonio, TX, 09/2002 – 08/2008.

Instructor, Dept. of Mathematics and Statistics, Oakland University, Rochester, MI, 05/2002 - 06/2002.

Graduate Teaching Associate, Dept. of Mathematics and Statistics, Oakland University, Rochester, MI, 01/1998 – 04/2002.

Counselor, Mathematics Summer Camp, Oakland University, 1998, 1999. Mentored gifted high school students in advanced mathematics courses.

Research Assistant, Effectiveness Research, Center of Health Care Division Wayne State University School of Medicine, MI, 05/2000 –08/2000.

Before that over a period of almost 15 years I worked at academic institutions and Government agencies in India and contributed in the following areas.

Analogue Speech Processing:
- Developed a Hierarchical Perception Linked Model (HPLM) for machine recognition of vowels with the help of first two Formant frequencies F1 & F2. The model has the advantage that it naturally converts an essentially multiclass multiparameter classification problem into two-class single parameter problem at each level.
- The HPLM was extended to recognize the unaspirated plosives in CV context and also to recognize semi-vowels and nasals.
- Developed an expert system for isolated word recognition, independent of the number of speakers and the size of the lexicon.

Digital Speech Processing:
- Developed a method based on a discriminant function to discriminate speech /non-speech region in a noisy speech signal.
- Applied different filtering processing techniques (Wiener filtering, Kalman filtering etc.) to process the speech signal, which was fully submerged in noise.
- Applied ARMA and AR models to get the spectrum of the speech signal as well as the first two formants in the connected speech.

6. INSTRUCTIONAL ACTIVITIES:

Courses Taught:

The University of Texas at San Antonio, TX.

STA 1053 Basic Statistics (undergraduate): Fall 2003, Spring 2009, Spring 2010, Fall 2010, Spring 2011, Summer 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Spring 2014, Fall 2015, Spring 2016, Fall 2016
STA 2303 Appl Probability & Stat-Engrs (undergraduate): Spring 2014, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016
STA 3013 Multivariate Analysis for the Life and Social Sciences (undergraduate): Fall 2003, Fall 2005, Fall 2007, Fall 2009
STA 3513 Probability and Statistics (undergraduate): Fall 2002, Spring 2003, Spring 2004, Fall 2004, Spring 2005

STA 3533 Probability and Random Process (undergraduate): Spring 2010, Spring 2012, Fall 2012
STA 3543 Statistics and Experimental Design for Computer Science (undergraduate): Spring 2006, Fall 2006, Spring 2007, Spring 2008
STA 4643 Introduction to Stochastic Processes (undergraduate): Spring 2004, Spring 2006
STA 4713 Applied Regression Analysis (undergraduate): Fall 2005
STA 5103 Applied Statistics (graduate): Spring 2009
STA 5713 Foundation of Linear Models (graduate): Fall 2002, Fall 2004, Fall 2006, Spring 2008
STA 5723 Theory and Application of Linear Models (graduate) Spring 2005
STA 5813 Applied Multivariate Statistics (graduate): Spring 2003, Spring 2007, Fall 2010
STA 6813 Multivariate Analysis (graduate): Fall 2014
STA 7033 Multivariate Statistical Analysis (doctoral): Fall 2007, Fall 2008, Fall 2009
STA 7723 Advanced Linear Models (doctoral): Fall 2008
STA 7813 Advanced Multivariate Analysis (doctoral): Fall 2010

Oakland University, MI.

Spring 2002: Linear Programming/ Elementary Functions (undergraduate)
Fall 1998 –Winter 2002: Elementary Algebra, Intermediate Algebra (undergraduate)

Invited Lectures:

The University of Texas at San Antonio, TX.

- Delivered a lecture on "The Time Dimension in Research" to the students of the COM 2213, Foundations of Communication class on Feb 9, 2004.

- Delivered a short lecture on "English Language and Cultural Experience" to the students of the COM 3553, Intercultural Communication class on Oct 3, 2002.

- Delivered a short lecture on "Gender, Culture and Communication" to the students of the COM 3083, Language and Communication Theory class on Nov 19, 2002.

Workshop Attended:

- Attended the "Provost's Academy: Creating Impactful Educational Experiences", on May 16-17, 2016 at UTSA, San Antonio, TX.

- Attended a professional development workshop "Data Analytics Research: Speed Networking Luncheon" on April 15, 2016 at UTSA, San Antonio, TX.

- Attended a professional development workshop "How Effective Communications Leads to Effective Teaching" by Dr. John Daly from University of Texas at Austin on April 4, 2016 at UTSA, San Antonio, TX.

- Attended a professional development workshop "Promoting Critical Thinking Skills through Cooperative Writing, Even in Large Classes" by Dr. Barbara Millis on September 18, 2012 at UTSA, San Antonio, TX.

- Attended a professional development workshop "Powerful Presentation Skills" by Dr. Jose Vazquez on January 12, 2012 at UTSA, San Antonio, TX.

- Attended a professional development workshop "Creating a Professional Portfolio" by Dr. Barbara Millis on October 14, 2011 at UTSA, San Antonio, TX.

- Attended the "Third Annual Provost's Academy on Critical Thinking", Evidence-based Teaching: Promoting Critical Thinking, Writing and Deep Learning on May 11-13, 2011 at UTSA HemisFair Park in San Antonio, TX.

- Attended a workshop "Pathways to the Future" by Dr. Lynne Billard on August 10-11, 2002 in New York City.

- Attended a teaching workshop on Jan 4, 2002 at Oakland University, Rochester, MI- 48309.

International Students Visit:

Ph.D. students Ms. Chengcheng Hao and Ms. Yuli Liang from Department of Statistics, Stockholm University, Sweden visited me for two weeks from Jan 19 to Feb 2, 2014. Both the students received scholarships from the Wallenberg Foundations from the Stockholm University to visit UTSA to work with me. I have introduced the concept of symbolic data to them and we have worked on 'Principal component analyses of symbolic data using patterned covariance structures' during their visit. The work is published in *Statistics & Probability Letters*.

External Evaluator for Dissertations:

Year	Student Name	Dissertation Title	Degree Completed/ In Progress
2008	Shyamal Kumar Das Mandal	Role of Shape Parameters in Speech Recognition: A Study On Standard Colloquial Bengali (SCB)	Ph.D. in Elect. & Telecom. Eng. Jadavpur Univ., Calcutta, India. -- Completed
2007	Saibal Kumar Pal	Development of Techniques for Protection and Analysis of Hidden Digital Information	Ph.D. in Computer Sc. Delhi Univ., India -- Completed

Theses and Dissertations Supervised:

Year	Student Name	Thesis Title	Degree Completed/ In Progress
2008	Christopher Louden	Classification of Data under Autoregressive Circulant Covariance Structure with Comparisons to Compound Symmetric Covariance Structure	M.S. in Statistics UTSA -- Completed

The thesis is published in the form of a printed book by VDM Verlag Dr. Müller AG & Co. KG.

2005-06	Joseph R. Roy	The Constant Rate Effect in the Spread of Syntactic Change: Applications of Alternating Logistic	M.S. in Statistics UTSA. -- Completed

Regressions in Historical Linguistic
Repeated Response data

Theses and Dissertations Committees:

Committee/board member in the following committees.

Year	Student Name	Thesis/Dissertation Title	Degree Completed/ In Progress
2016	Binbin Wang	TBA	Ph.D. in Applied Stat UTSA
2015-Present	Matthew Benavides	TBA	Ph.D. in Applied Stat. UTSA
2015-Present	Zifei Han	Gaussian Copula Models for Geostatistical Count Data	Ph.D. in Applied Stat. UTSA
2015	Sudip Roy	COM type generalizations of hypergeometric and negative hypergeometric distributions	Ph.D. in Applied Stat. (First part only) UTSA
2012-2014	Bazoumana Kone	Block Prediction Intervals	Ph.D. in Applied Stat. UTSA. -- Completed
2010-2014	Jermaine Vesey	Exploring the Role of Motivation on Workplace Outcomes	Ph.D. in Management UTSA. -- Completed
2008-09	Mei-Ching Chen	Image Security and Recognition System	Ph.D. in Elect. & Computer Eng. UTSA. -- Completed
2004-05	Jonathan A. Vance	A Continuous Emission Tracking And Predictive Model for Emissions Reduction and Process Improvement	M.S. in Statistics UTSA. -- Completed

Thesis Supports:

Provided consulting assistance in developing the statistical models used in the following thesis. Not a member of the thesis committee.

Year	Student Name	Thesis Title	Degree Completed/ In Progress
2003-04	Octavio Garza	Food Service Establishment Waste-water Characterization and Management Practice Evaluation.	M.S. in Civil Eng. Texas A&M Univ. -- Completed

Honors Credits:

Semester	Student Name	Course
Fall 2005	Ashok K. Chaurasia	STA 3013 (Multivariate Analysis for the Life and Social Sciences)
Spring 2006	Ashok K. Chaurasia	STA 4643 (Introduction to Stochastic Processes)

7. HONORS, RECOGNITIONS AND AWARDS:

- Invited to attend a five day International Research Group Meeting on *Multivariate Linear Models* in March 14-18, 2016 at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.
- Invited to attend a five day research meeting on *Multivariate Linear Models* in March 9-13, 2015 at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.
- Invited to attend a five day research meeting on *Multivariate Linear Models* in November 10-14, 2014 at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.
- Invited to attend a five day research meeting on *Multivariate Linear Models* in March 24-28, 2014 at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.
- Invited to attend a five day research meeting on *Mixed and Multivariate models* in Oct 21-25, 2013 at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.
- Awarded the Faculty Development Leave for Fall 2013.
- Invited to attend a five day *Bedlewo Spring'2013* research meeting on *Planning and Analysis of Tensor-Experiments* in April 22 - 26, 2013 at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.
- Awarded a research grant from the Royal Swedish Academy of Sciences, Sweden, Göran Gustafsson Stiftelse, for 2012-2014.
- Received the *Franklin V. Taylor memorial certificate of merit for the Best Paper and Oral Presentation in 2009 IEEE International Conference on Systems, Man, and Cybernetics*.
- Appeared in *Who'sWho in professional* 2013-14.
- Appeared in *Who'sWho in the World*, 2010.
- Appeared in *Who'sWho in America*, 2009 (110th Anniversary Edition), 2012, 2013, 2014, 2015.
- Appeared in *Who'sWho in Healthcare*, 2007 Web Version, 2008.
- Appeared in *Who'sWho among America's Teachers & Educators*™, 2007.
- Appeared in *Who'sWho of American Women* 2006 (*25th Silver Anniversary Edition*), 2007, 2008-2009, Appeared in 2010-2011 Edition.
- Appeared in Academic Keys *Who'sWho in Business Education*, 2006.
- Certificate of merit (6 times) for outstanding academic achievement in Oakland University, Dept. of Mathematics and Statistics.
- "Ramanujam Award" for the best academic performance, India.
- National Merit Scholarship (Twice), Govt. of India.
- First Prize for overall good academic record in Presidency College, Calcutta, India.
- Prize in the Intercollegiate Essay competition on Astronomical work of Aryabhatta I, Calcutta University, India.

8. GRANTS AND PROJECTS:

Grants Funded:

2012 -2014	Research Team Member in a Grant	"Classification procedures and covariance structure learning methods for multi-level high-dimensional data." *The Royal Swedish Academy of Sciences*, Göran Gustafsson Stiftelse, Sweden.
2007	Research Team Member in a Grant	"Discriminación en el modelo de medidas repetidas Multivariadas." Secretaría de Ciencia y Técnica de la Universidad Nacional de Cuyo, *SECYT- UNC*, Argentina.
2006	Faculty Research Award	*University of Texas at San Antonio*
2004	As Statistical Consultant	"Age-related Effect of Bone Remodeling on the Toughness of Bone." *NIH Grant*
2003 -2013	Summer Research Grants	*College of Business, University of Texas at San Antonio*
2001	Graduate Research Grant	*Oakland University, MI*

Grants not Funded:

2013	Co-Investigator	"Smart Delivery System for Repairing Large Bone Defect" *NIH Grant*
2013	Co-Investigator	"Estimation and hypotheses testing in models with multiindices observations matrix." Ministry of Education, Poland.
2013	Research Team Member in a Project	"Análisis de componentes principales en series de tiempo" (Principal Component Analysis in Time Series) SECTyP-UNCuyo (Secretaría de Ciencia y Técnica de la Universidad Nacional de Cuyo.
2012	Co-Investigator	"Toward Patient-Specific Assessment of Abdominal Aortic Aneurysm Evolution" *NIH Grant*
2011	Co-Investigator	"Individualized Assessment of Abdominal Aortic Aneurysm Rupture Risk" *NIH Grant*
2011	Co-Investigator	"The Role of Inflammatory Markers in Aortic Aneurysm Rupture Risk Assessment" *NIH Grant*
2003	As Statistical Consultant	"Role of Collagen in the Post-yield Behavior of Bone." *NIH Grant*

9. MAIN COLLABORATORS:
Ricardo Leiva, Miguel Fonseca, Daniel Klein, Ivan Žežula, Katarzyna Filipiak and Roman Zmyślony.

10. PUBLICATIONS:

Refereed Statistical Journal Articles:

1. Filipiak K., Klein D. and Roy Anuradha, (2016) "Score Test for a Separable Covariance Structure with the First Component as Compound Symmetric Correlation Matrix", *Journal of Multivariate Analysis,* In Press.

2. Roy Anuradha, Zmyślony, R., Fonseca, M. and Leiva R. (2016) "Optimal Estimation for Doubly Multivariate Data in Blocked Compound Symmetric Covariance Structure" *Journal of Multivariate Analysis*, 144, 81-90.

3. Hao C., Liang Y. (Ph.D. students) and Roy Anuradha, (2015) "Equivalency between Vertices and Centers-coupled-with-radii Principal Component Analyses for Interval Data", *Statistics & Probability Letters*, 106, 113-120 (cited 1 time).

4. Roy Anuradha, Leiva R., Žežula I. and Klein D. (2015) "Testing of Equality of Mean Vectors for Paired Doubly Multivariate Observations in Blocked Compound Symmetric Covariance Matrix Setup", *Journal of Multivariate Analysis*, 137, 50-60 (cited 5 times).

5. Leiva R., Roy Anuradha, Bageta R. and Pina J. C. (2015) "An Extension of the Birnbaum-Saunders Distribution as a Model for Fatigue Failure due to Multiple Cracks", *Journal of Statistical Theory and Practice,* 9(1), 88-121. (cited 1 time)

6. Leiva R. and Roy Anuradha, (2014) "Classification of Higher-Order Data with Separable Covariance and Structured Multiplicative or Additive Mean models", *Communications in Statistics – Theory and Methods,* 43(5), 989–1012.

7. Roy Anuradha and Fonseca M. (2012), "Linear Models with Doubly Exchangeable Distributed Errors", *Communications in Statistics – Theory and Methods,* 41(13), 2545–2569 (cited 7 times).

8. Roy Anuradha and Leiva R. (2012), "Classification Rules for Multivariate Repeated Measures Data with Equicorrelated Correlation Structure on both Time and Spatial Repeated Measurements", *Communications in Statistics – Theory and Methods,* 41(8), 1411-1420 (cited 4 times).

9. Leiva R. and Roy Anuradha, (2012), "Linear discrimination for three-level multivariate data with separable additive mean vector and doubly exchangeable covariance structure", *Computational Statistics and Data Analysis,* 56(6), 1644-1661 (cited 8 times).

10. Roy Anuradha and Leiva R. (2011), "Estimating and Testing a Structured Covariance Matrix for Three-level Multivariate Data", *Communications in Statistics – Theory and Methods*, 40(11), 1945-1963 (cited 14 times).

11. Leiva R. and Roy Anuradha, (2011), "Linear Discrimination for Multi-level Multivariate Data with Separable Means and Jointly Equicorrelated Covariance Structure", *Journal of Statistical Planning and Inference,* 141(5), 1910-1924 (cited 13 times).

12. Leiva R. and Roy Anuradha, (2011), "A Quadratic Classification Rule with Equicorrelated Training Vectors for Non-random Samples", *Communications in Statistics – Theory and Methods*, 40(2), 213-231 (cited 2 time).

13. Louden C. (M.S. student) and Roy Anuradha, (2010), "Classification Rules under Autoregressive and General Circulant Covariance", *Communications in Statistics – Theory and Methods*, 39(18), 3294-3315 (cited 1 time).

14. Leiva R. and Roy Anuradha, (2009), "Classification Rules for Triply Multivariate Data with an AR(1) Correlation Structure on the Repeated Measures over Time", *Journal of Statistical Planning and Inference*, 139(8), 2598-2613 (cited 6 times).

15. Roy Anuradha (2009), "An Application of Linear Mixed Effects Model to Assess the Agreement between Two Methods with Replicated Observations", *Journal of Biopharmaceutical Statistics*, 19(1), 150-173 (cited 14 times).

16. Roy Anuradha and Leiva R. (2008), "Likelihood Ratio Tests for Triply Multivariate Data with Structured Correlation on Spatial Repeated Measurements", *Statistics & Probability Letters*, 78(13), 1971-1980 (cited 24 times).

17. Roy Anuradha (2008), "Computation Aspects of the Parameter Estimates of Linear Mixed Effects Model in Multivariate Repeated Measures Set-up", *Journal of Applied Statistics*, 35(3), 307-320 (cited 4 times).

18. Roy Anuradha and Leiva R. (2007), "Discrimination with Jointly Equicorrelated Multi-level Multivariate Data", *Advances in Data Analysis and Classification*, 1(3), 175-199 (cited 15 times).

19. Roy Anuradha and Khattree R. (2007), "Classification of Multivariate Repeated Measures Data with Temporal Autocorrelation", *Journal of Applied Statistical Science*, 15(3), 283-294 (cited 12 times).

20. Roy Anuradha (2006), "A New Classification Rule for Incomplete Doubly Multivariate Data using Mixed Effects Model with Performance Comparisons on the Imputed Data", *Statistics in Medicine*, 25(10), 1715-1728 (cited 11 times).

21. Roy Anuradha (2006), "Estimating Correlation Coefficient between Two Variables with Repeated Observations using Mixed Effects Model", *Biometrical Journal*, 48(2), 286-301 (cited 67 times).

(*This paper is the Most Accessed Paper in Three Consecutive Years 2014- 2016 in Biometrical Journal*.)

22. Roy Anuradha (2006), "Testing of Kronecker Product Structured Mean Vectors and Covariance Matrices", *Journal of Statistical Theory and Applications*, 5(1), 53-69 (cited 6 times).

23. Roy Anuradha and Khattree R. (2005), "A Study of Covariance Structures for Repeated Measures in the Context of Classification Analysis", *Journal of the Indian Statistical Association*, 43(2), 127-145.

24. Roy Anuradha and Khattree R. (2005), "Classification Based on Multivariate Repeated Measures with Time Effect on Mean Vector and an AR(1) Correlation Structure on the Repeated Measures", *Calcutta Statistical Assoc. Bulletin*, 57, 49-65 (cited 2 time).

25. Roy Anuradha and Khattree R. (2005), "On Implementation of a Test for Kronecker Product Covariance Structure for Multivariate Repeated Measures Data", *Statistical Methodology*, 2(4), 297-306 (cited 35 times).

26. Roy Anuradha and Khattree R. (2005), "On Discrimination and Classification with Multivariate Repeated Measures Data", *Journal of Statistical Planning and Inference*, 134(2), 462-485 (cited 21 times).

27. Roy Anuradha and Khattree R. (2005), "Discrimination and Classification with Repeated Measures Data under Different Covariance Structures", *Communications in Statistics-- Simulation and Computation*, 34(1), 167-178 (cited 12 times).

28. Roy Anuradha and Khattree R. (2003), "Tests for Mean and Covariance Structures Relevant in Repeated Measures Based Discriminant Analysis", *Journal of Applied Statistical Science*, 12(2), 91-104, (cited 25 times).

Refereed Biomedical, Medical and Other Scientific Journal Articles:

29. Roy Anuradha, Fuller C. D., Rosenthal D. I. and Thomas C. R. Jr., (2015) "Comparison of Measurement Methods with a Mixed Effects Procedure Accounting for Replicated Evaluations (COM_3PARE): Method Comparison Algorithm Implementation for Head and Neck IGRT Positional Verification", *BMC Medical Imaging*,15:35 (11 pages) (cited 1 time).

30. Starnes J. W., Neidre D. B., Nyman J. S., Roy Anuradha, Nelson M. J., Gutierrez G. and Wang X., (2013) "Synergistic Effect of Exercise and Statins on Femoral Strength in Rats", *Experimental Gerontology*, 48(8), 751-755 (cited 5 time).

31. Chen C. L. P., Chen M. C., Agaian S. S., Zhou Y., Roy Anuradha, Rodriguez B. M., (2012), "A pattern recognition system for JPEG steganography detection", *Optics Communications*, 285(21-22), 4252-4261(cited 1 time).

32. Nyman J. S., Roy Anuradha, Reyes M. J., and Wang X. (2009), "Mechanical Behavior of Human Cortical Bone in Cycles of Advancing Tensile Strain for Two Age Groups", *Journal of Biomedical Materials Research: Part A*, 89(2), 521-529 (cited 13 times).

33. Oubre C. M., Roy Anuradha, Toner C. and Kalns J. (2007), "Retrospective Study of Factors Affecting Non-Healing of Wounds During Hyperbaric Oxygen Therapy", *Journal of Wound Care*, 16(6), 245- 250 (cited 19 times).

34. Nyman J. S., Roy Anuradha, Tyler J. H., Acuna R. L., Gayle J. H. and Wang X. (2007), "Age-Related Factors Affecting the Postyield Energy Dissipation of Human Cortical Bone", *journal of Orthopaedic Research*, 25(5), 646- 655 (cited 75 times).

35. Nyman J. S., Roy Anuradha, Acuna R. L., Gayle H. J., Reyes M. J., Tyler J. H., Dean D. D. and Wang X. (2006), "Age-Related Effect on the Concentration of Collagen Cross-Links in Human Osteonal and Interstitial Bone Tissue", *Bone*, 39(6), 1210-1217 (cited 45 times).

36. Nyman J. S., Roy Anuradha, Shen X. M., Acuna R. L., Tyler J. H. and Wang X. (2006), "The Influence of Water Removal on the Strength and Toughness of Cortical Bone", *Journal of Biomechanics*, 39(5), 931-938 (cited 158 times).

37. Banerjee M., George J., Song E. Y., Roy Anuradha and Hryniuk W. (2004), "Tree-Based Model for Breast Cancer Prognostication", *Journal of Clinical Oncology*, 22(13), 2567-2575 (cited 86 times).

38. Kalns J., Roy Anuradha, Loeffler C. and Wright J. K. (2004), "A Retrospective Evaluation of Digital Wound Imaging to Predict Response to Hyperbaric Oxygen Treatment", *Ostomy/Wound Management*, 50(4), 36-48.

39. Roy Anuradha and Datta A. K. (1994), "A Hierarchical Perception Linked Model for Machine Recognition of Vowels in Telugu", *Acustica*, 80(4), 406-412 (cited 2 times).

40. Datta A. K., Ganguly N. R., Roy Anuradha and Mukherjee B. (1991), "A Hierarchical Perception-Linked Model for Machine Recognition of Phonemes", *Information Sciences*, 55, 259-269.

41. Datta A. K., Roy Anuradha and Ganguli N. R. (1987), "An Expert System for Key Syllable Based Isolated Word Recognition", *Pattern Recognition Letters*, 6, 145-150 (cited 6 times).

42. Roy Anuradha (1986), "A Note on the Aerodynamic Force System on an Axis- Symmetric Body", *Journal of Armament Studies*, 23-26.

Conference Proceedings (Refereed):

43. Leiva R., Roy Anuradha, Bageta R. and Pina J. C. (2016) "Model of fatigue failure due to equicorrelated multiple cracks using extended Birnbaum-Saunders distribution", *60th ISI World Statistics Congress (WSC)*, Rio de Janeiro, Brazil, 941-946.

44. Coelho A. C. and Roy Anuradha (2016) "Developing near-exact distributions for likelihood ratio statistics to test for Kronecker product structures in covariance matrices", *60th ISI World Statistics Congress (WSC)*, Rio de Janeiro, Brazil, 0-5.

45. Fonseca M. and Roy Anuradha (2012), "Discriminant Analysis in Models with Structured Mean and Covariance", 1686-1689, *Proceedings of the International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2012)*, Kos, Greece.

46. Chen M. C. (ECEng Ph.D. student), Roy Anuradha and Rodriguez B. M., Agaian S. S. and Chen C. L. P. (2009), "An Application of Linear Mixed Effects Model to Staganography Detection", 1782-1786, *Proceedings of the 2009 IEEE International Conference on Systems, Man, and Cybernetics*, San Antonio, Texas (cited 3 times).

(This paper was Nominated as one of the five finalists for the Franklin V. Taylor Memorial Award for the Best Paper and Oral Presentation in IEEE SMC 09, and Awarded the certificate of merit.)

47. Roy Anuradha and Leiva R. (2007), "Classification Rules for Multi-level Multivariate Data", *Proceedings of the 2nd International Conference on Innovative Computing, Information and Control*, Kumamoto City, Japan. (Indexed by EI Compendex) (cited 1 time).

48. Roy Anuradha and Khattree R. (2005), "Testing the Hypothesis of a Kroneckar Product Covariance Matrix in Multivariate Repeated Measures Data", *Proceedings of the 30th Annual SAS Users Group International Conference* (SUGI 30), Philadelphia (cited 16 times).

49. Roy Anuradha, Bhowmick B. K. and Datta A. K. (1984), "A Statistical Approach for Recognition of Vowels in Connected Speech", *Proceedings of the IEEE International Conf. on System Man and Cybernetics*, Bombay, India, 340-344.

Conference Proceedings (Non-refereed):

50. Roy Anuradha and Leiva R. (2008), "Testing of Hypothesis of a Structured Mean Vector for Three-level Multivariate Data with Structured Correlations on Repeated Measurements", *Proceedings of the American Statistical Association, Statistical Computing Section*, 1940- 1947.

51. Roy Anuradha (2007), "A Note on Testing of Kroneckar Product Covariance Structures for Doubly Multivariate Data", *Proceedings of the American Statistical Association, Statistical Computing Section*, 2157- 2162 (cited 6 times).

52. Roy Anuradha (1993), "A Method to Discriminate Between Speech/ Non-Speech Region in a Noisy Speech Signal and Some Related Observations", *Proceedings of the 3rd International Conference on Advances in Pattern Recognition and Digital Techniques* at Indian Statistical Institute, Calcutta, India, 124-129.

53. Roy Anuradha (1993), "Discrimination Between Speech/Non-Speech Region in a Noisy Speech Signal Using the Direction Cosines along each Band of the Spectrum", *Proceedings of the Ninth International Congress of Cybernetics and Systems*, New Delhi, India, 93-98.

54. Roy Anuradha and Datta A. K. (1984), "A Perceptual Model for A.S.R.", *Proceedings of the International Conference on Computer Systems and Signal Processing*, Bangalore, India.

Book Chapters:

1. Roy Anuradha and Khattree R. (2007), "Classification Rules for Repeated Measures Data from Biomedical Research", In: Khattree R. and Naik D. N. (Eds) *Computational Methods in Biomedical Research*, 323-370 (cited 10 times).

Letters to the Editor:

1. Lee C. H. (Ph.D. student), Dutilleul P. and Roy Anuradha (2010), "Models with a Kronecker Product Covariance Structure: Estimation and Testing", by Srivastava M. S., von Rosen T. and von Rosen D., *Mathematical Methods of Statistics*, 19(1), 88- 90 (cited 7 times).

Published Abstracts:

1. Wood M. A., Aherne N. J., Herden J. P., Dean J. L. Hill J. D., Last A., Everitt C., Fuller C. D., Roy Anuradha, Shakespeare T. P. (2009) "Fiducial Marker (FM) Matching Versus Bone Matching in Image Guided Intensity Modulated Radiation Therapy (IG-IMRT) of the Prostate Bed following Radical Prostatectomy", *Proceedings of the 51st annual meeting of American Society for Therapeutic Radiation and Oncology*.

2. Aherne N. J., Wood M. A., Herden J. P., Mincham S., Last A., Hill J. D., Fuller C. D. Roy Anuradha, Shakespeare T. P. (2009) "Fiducial Based Target definition in Patients Undergoing Salvage IMRT following Prostatectomy", *Proceedings of the Asian Oncology Summit, Poster Discussion, Preferred Papers, Genito Urinary,* # 205.

3. Neidre D. B., Nyman J. S., Roy Anuradha**,** Nelson M. J., Gutierrez G., Wang X. and Starnes J. W. (2007), "Treadmill Exercise Plus Statin Administration Increases Femoral Strength in Rats", *Proceedings of the* 53rd *Annual Meeting of the Orthopaedics Research Society*, # 1397.

4. Reyes M. J., Nyman J. S., Roy Anuradha and Wang X. (2006), "Post-yield Energy Dissipation as Function of Strain in Middle and Old Aged Cortical Bone", *Proceedings of the Annual Fall Meeting of the Biomedical Engineering Society,* # 1371.

5. Nyman J. S., Tyler J. H., Acuna R. L., Roy Anuradha and Wang X. (2005), "Age and Gender Differences in the Post-Yield Energy Dissipation of Cortical Bone", *Proceedings of the Annual Fall Meeting of the Biomedical Engineering Society*, # 106. P1.40.

6. Nyman J. S., Tyler J. H., Roy Anuradha, DeLeon A. and Wang X. (2005), "The Effect of Age and Gender on the Post-Yield Energy Dissipation of Cortical Bone", *Proceedings of the 51st Annual Meeting of the Orthopaedics Research Society*, # 0669.

7. Nyman J. S., Roy Anuradha, Shen X. M. and Wang X. (2004), "The Role of Water Distribution on the Strength and Toughness of Cortical Bone", *Proceedings of the Annual Fall Meeting of the Biomedical Engineering Society,* # 1036.

8. Banerjee M., Song E. Y., Roy Anuradha, Du W. and Hryniuk W. (2001), "A Tree-Based Model for Breast Cancer Prognosis", *Proceedings of the American Association for Cancer Research*, # 3092, Vol. 42, 576.

11. RECENT PRESENTATIONS:

At the National and International Meetings:

1. Going to present an invited paper for an Organized Session EO107: Recent advances in complex data modeling and computational methods at the *9th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2016)* on December 9-11, 2016 in the University of Seville, Spain. The title of my talk will be "".

2. Attended the *Conference of Texas Statisticians* on April 8-9, 2016 at Trinity University, San Antonio, TX.

3. Attended the *2016 Texas FreshAIR Big Data & Data Analytics* Conference on March 30-31, 2016 at the University of Texas at San Antonio, San Antonio, TX.

4. Presented an invited paper for an Organized Session EO168: Recent Advances in Statistical Modeling and Computation at the *8th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2015)* on December 12, 2015 in the University of London, UK. The title of my talk was "Hypothesis Test for the Equality of Two Population Mean Vectors for Doubly Multivariate Data".

5. Presented a paper (peer-reviewed/refereed) at the Session on Principal Component Analysis of the workshop *SDA2015: Symbolic Data Analysis* on November 18, 2015 in MAPMO Laboratory, CNRS-University of Orléan, France. The title of my talk was "Principal Component Analyses of Interval Data using Patterned Covariance Structures".

6. Presented an invited talk at the Southwest Research Institute, San Antonio, on October 12, 2015. The title of my talk was "A Look at Multivariate Analysis for the 21st Century Data".

7. Presented an invited paper for an organized Session Recent Advances in Multivariate Analysis at the *IASC-ABE Satellite conference 2015: Statistical Computing for Data Science* on August 2, 2015 in Búzios, Brazil. The title of my talk was "What is beyond the Hotelling's T square test?"

8. Presented a paper (peer-reviewed/refereed) at the Session on Business and Industry of the *60th ISI World Statistics Congress (WSC)*, on July 30, 2015 in Rio de Janeiro, Brazil. The title of my talk was "Model of fatigue failure due to equicorrelated multiple cracks using extended Birnbaum-Saunders distribution".

9. Presented an invited paper at the Mini-symposium on Matrices Useful for Modelling Multi-level Models of *the 24th International Workshop on Matrices and Statistics* on May 27, 2015 in Haikou, China. The title of my talk was "Score test for a separable covariance structure with the first component as AR(1) correlation matrix and its performance comparison with the likelihood ratio test".

10. Presented and discussed an invited paper partially at a research meeting on *Multivariate Linear models* on March 9, 2015, at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland. The title of my talk and discussion was "On separability tests of covariance matrix with small sample size in multivariate repeated measures data".

11. Presented and discussed an invited paper partially at a research meeting on *Multivariate models* on November 12, 2014, at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland. The title of my talk and discussion was "Hypothesis testing of the equality of two mean intervals for symbolic data".

12. Presented a paper at *LinStat2014* on August 25, 2014 in Linköping, Sweden. The title of my talk was "Model of Fatigue failure due to Multiple Cracks using Extended Birnbaum-Saunders Distribution".

13. Presented a paper (peer-reviewed/refereed) at the Session on Multivariate statistics of the *21st International Conference on Computational Statistics (COMPSTAT 2014)* on August 19, 2014 in Geneva, Switzerland. The title of the talk was "Same, but Better: Comparing Centers-coupled-with-radii and Vertices Principal Component Analyses for Symbolic Data".

14. Presented an invited paper at the topic contributed section "Analysis with Kronecker Product Structured Covariance Matrices" of the *Joint Statistical Meetings* on August 4, 2014 in Boston. The title of my talk was "Two-stage Principal Component Analyses of Symbolic Data using Patterned Covariance Structures".

15. Presented an invited paper at the section on Multivariate and Univariate Statistical Inference of the *IISA (International Indian Statistical Association)* 2014 conference in North America on July 12,

2014 in Riverside, California. The title of the talk was "Student's t, Hotelling's T-square and after Hotelling's T-square test".

16. Presented an invited paper at *Oakland University* Colloquium Series, on March 11, 2014. The title of my talk was "Principal Component Analyses of Symbolic Data Using Patterned Covariance Structures".
17. Presented an invited paper at a research meeting on *Multivariate models* on March 26, 2014, at the Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland. The title of my talk was "Principal Component Analyses of Symbolic Data using Patterned Covariance Structures".

16. PROFESSIONAL TRAINING:

1. Attended a course "From Idea to Publication: How to Get that Book Written" offered by James Ramsay, McGill University and Maura Stokes, SAS Institute at the *Joint Statistical Meeting* on August 5, 2014 in Boston, MA.

2. Attended a course "Dropout in Longitudinal Clinical Trials" offered by Mike Kenward, London School of Hygiene & Tropical Medicine, United Kingdom at the *4th Nordic-Baltic Biometric Conference, NBBC13* on June 9, 2013 at the Karolinska Institutet in Solna, Sweden.

3. Attended a course "Bayesian Analyses Using SAS" offered by Mike Patetta, Senior instructor and course developer in SAS at the *International Conference on Advances in Interdisciplinary Statistics and Combinatorics* on October 5, 2012 at the University of North Carolina in Greensboro, Greensboro, NC.

4. Attended a course "Analysis of Longitudinal Data Using Antedependence Models" offered by Dale Zimmerman, The University of Iowa, at the *Joint Statistical Meeting* on August 3, 2010 in Vancouver, British Columbia, Canada.

5. Attended a course "Special Classes of Matrices: Positivity" offered by C. R. Johnson at the *MAT-TRIAD 2009*, Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.

6. Attended a one-day course on "Hot Topics in Clinical Trials" offered by Scott Evans, Lingling Li, L.J. Wei and Marvin Zelen at the *Graybill Conference VII* on June 11, 2008 in Colorado State University, Fort Collins, CO.

7. Attended a one-day course on "Generalized Linear Mixed Models: Theory and Applications" offered by Dr. Oliver Schabenberger, SAS Institute, Inc, at the *Joint Statistical Meeting* on August 6, 2006 in Seattle, WA.

8. Attended a one-day course on "GLMM and GEE Modeling of Complex, Non-Gaussian, Correlated Data" offered by Drs. Jose Pinheiro and Edward Chao, at the *ENAR spring meeting* on March 20, 2005 in Austin, TX.

9. Attended a tutorial on "Quantile Regression" offered by Drs. Xuming He and Ying Wei, at the *ENAR spring meeting* on March 21, 2005 in Austin, TX.

10. Attended a one day traveling course on "Applied Nonlinear Statistical Methods", offered by Dr. Timothy E. O'Brien on March 9, 2005 in San Antonio, TX. The course was arranged by the San Antonio Chapter of the *American Statistical Association* (ASA) and the ASA Council of Chapters.

11. Attended a one-day course on "Longitudinal and Incomplete Data" offered by Dr. Greet Verbeke, Katholieke Universiteit Leuven, and by Dr. Greet Molenberghs, Limburgs Universitar Centrum, on April 2, 2004 at *George Mason University*, Virginia.

12. Attended a short course on "Power and Sample Size Analysis Using New SAS/STAT Software" offered by Dr. John Castelloe, SAS Institute, Inc, at the *Joint Statistical Meeting* on Aug 6, 2003 in San Francisco, CA.

13. Attended a short course on "Multiple Imputation for Missing Data with SAS Software" offered by Dr. Yang C. Yuan, SAS Institute, Inc. at the *Joint Statistical Meeting* on Aug 6, 2003 in San Francisco, CA.

14. Attended a two-day workshop on "Nucleic Acid and Protein Sequence Analysis" on March 5 –6, 2003, at the *University of Texas at San Antonio*, TX.

15. Attended one-day short course on the "Introduction to Mixed Models for Longitudinal Studies" offered by Prof. Donald Hedeker at the *8th Biennial CDC and ATSDR Symposium* on Statistical Methods on Jan 22, 2001 in Atlanta, GA.

16. Attended a Research Workshop on "Classification and Large Data Sets (CLDS)" offered by Prof. David Hand on May 17-18, 2001 at *University of Waterloo*, Canada.

17. Attended a training in Parallel Programming, India.

18. Attended a training in Object Oriented Programming using C++, India.

19. Attended a training in Computational Linguistics and Management Courses, India.

17. SERVICE:

Editorial Service:

- Editor-in-Chief for *Journal of Data Analysis and Operations Research*, 2012 --2013. This is a new refereed electronic international journal according to the international accredited standard, launched by the Department of Statistics of the University of Bahrain.

Professional Service:

- Volunteer as judge for the research posters at *Conference of Texas Statisticians* at Trinity University, San Antonio, on April 8, 2016.

- Volunteer as judge for the San Antonio American Statistical Association (ASA) Chapter Special Award for the best application of statistics at the Texas Science and Engineering Fair at the Henry B. Gonzalez Convention Center, San Antonio, on April 2, 2016.

- Volunteer as judge for the San Antonio American Statistical Association (ASA) Chapter Special Award for the best application of statistics in the senior division (high school) research projects, at the Alamo Regional Academy of Science and Engineering (ARASE) 2016 Fair at the St. Mary's University, San Antonio, on February 26, 2016.

- Organizer (asked for) and chair of a Session "Recent Advances in Multivariate Analysis" for the International Association for Statistical Computing and Associação Brasileira de Estatística (*IASC-ABE) Satellite Conference 2015: Statistical Computing for Data Science* on August 2, 2015 in Búzios, Brazil.

- Organizer (selected) of the Special Topic Paper Session (STS062) "Statistical Modeling of Multi-level Multivariate Data using Kronecker Product Structured Covariance Matrices" for the *60th ISI World Statistics Congress* on July 31, 2015 in Rio De Janeiro, Brazil.

- Organizer and the Chair of the Special Session "The use of Kronecker Product in Statistical Modeling" for the *LinStat 2014* on August 25, 2014 in Linköping, Sweden.

- Chair of the Session "Contributions to Longitudinal Data Analysis I" of the *COMPSTAT 2014* on August 20, 2014 in Geneva, Switzerland.

- Volunteer for International Indian Statistical Association (IISA) at the *Joint Statistical Meetings* in Boston, on Aug 3 and Aug 4, 2014.

- Chair of a session of the *MAT-TRIAD 2013* on September 17, 2013 in Herceg-Novi, Montenegro.

- Chair of the Session on High-Dimensional Statistical Inference of the 29th European Meeting of Statisticians, EMS 2013 on July 23, 2013, in Budapest, Hungary.

- Chair of the Session Multivariate Analysis part I at *LinStat 2012* on July 16, 2012 in Bedlewo, Poland.

- Chair of the Session 7 at the *MAT-TRIAD* 2011 on July 13, 2011 in Tomar, Portugal.
- Reviewer of Book Proposal to SAGE publications, UK in 2011.

- Participated in the Statistical Science Delegation to China on behalf of the American Statistical Association in Dec 2010.

- External reviewer for evaluation of tenure promotion in 2010.

- Chair of the Session XXII – Statistical Inference in Mixed and Multivariate Linear Models III at the LinStat 2010 on July 28, 2010 in Tomar, Portugal.

- Chair of the Session XV at the *MAT-TRIAD 2009* on March 26, 2009, Mathematical Research and Conference Center of the Polish Academy of Sciences in Bedlewo, Poland.

- Chair of the Applied Statistics Session at the 8th Annual Hawaii International Conference on Statistics, Mathematics and Related Fields on January 14, 2009 in Honolulu, Hi.

- Volunteer for two sessions as Session Coordinator for the pre-conference Statistical Tutorials at the SAS Global Forum 2008 conference on March 16, 2008 in San Antonio.

- Volunteer on behalf of San Antonio ASA in support of schools/ teachers /students that plan to participate in the 2008 Alamo Regional Science and Engineering Fair at the UT Health Science Center on September 29, 2007 in San Antonio.

- Present the 2007 Don Owen Award to Jeffrey D. Hart, Ph.D., on March 30, 2007 at the Conference of Texas Statisticians in Waco TX

- Chair of the Cancer Applications, Including Spatial Cluster Detection Session of ASA Biometrics Section at the ENAR Meeting on March 13, 2007 in Atlanta Georgia.

- Chair of the Inference Session of Section on Statistical Computing at the Joint Statistical Meeting on August 7, 2006 in Seattle.

- Volunteer as judge for the San Antonio American Statistical Association (ASA) Chapter Special Award for the best application of statistics at the Exxon Mobil Texas Science and Engineering Fair (EMTSEF) at the Henry B. Gonzalez Convention Center, San Antonio, in 2006.

- Volunteer as judge for the San Antonio American Statistical Association (ASA) Chapter Special Award for the best application of statistics in the senior division (high school) research projects, at the 2006 Alamo Regional Science and Engineering Fair at the St. Mary's University, San Antonio, on March 11, 2006.

- Present a talk (3 Sessions) at the Career Day on May 6, 2005, at the University of Texas at San Antonio Downtown, San Antonio, TX. The title of my talk was "A Statistician Looks at Diabetic Foot Wounds".

- Organizer of the 2005 Applied Nonlinear Statistical Methods Traveling Course on behalf of the San Antonio Chapter of the American Statistical Association (ASA), and the ASA Council of Chapters, on March 9, 2005.

- Representative of American Statistical Association (ASA)**,** Council of Chapters (COC) (San Antonio) Representative, January 2005- December 2007.

- Editorial Representative/Newsletter Editor to International Indian Statistical Association (IISA), July 2003- June 2004.

- Volunteer on behalf of San Antonio ASA for the Science Open House for high school students to publicize the ASA activities at the UT Health Science Center on November 6, 2004 in San Antonio.

- Volunteer as judge for the San Antonio American Statistical Association (ASA) Chapter Special Award for the best application of statistics in the senior division (high school) research projects, at the Science and Engineering Fair in the Incarnate Word Grossman International Conference Center, San Antonio, on Mar 8, 2004.

- Volunteer for Career Day Grants exhibition, sponsored by the Committee on Career Development, American Statistical Association, at the Joint Statistical Meetings in San Francisco, on Aug, 2003.

- Volunteer for International Indian Statistical Association (IISA) at the Joint Statistical Meetings in San Francisco, on Aug, 2003.

Academic Service:

- Graduate Council Graduate Programs & Courses Committee, Fall 2015 – Present.
- Presented the proposal of M.A. in Educational Psychology at the Graduate Council meeting on May 10, 2016.
- Graduate Council Graduate Program Evaluation Committee, Fall 2015 – Present.
- Member Department Faculty Review Advisory Committee (DFRAC), Fall 2008 – Spring 2015.
- Member College Faculty Review Advisory Committee (CFRAC), Fall 2014 – Spring 2015.
- Member, Applied Statistics Journal and Conference Ranking Committee, Fall 2013 – Spring 2014.
- Member, Faculty Senate Evaluations, Merit, Rewards, and Workload Committee, Fall 2010 – Present.
- Member, The University of Texas at Health Science Center at San Antonio (UTHSCSA) Institutional Review Board, Summer 2011- Summer 2012.
- Member, Faculty Senate Academic Policy & Requirements Committee, Fall 2010 – Fall 2013.
- Member, Ph.D. Admissions Committee, Spring 2006 – Spring 2010.
- Member, M.S. Program Self-study Committee, Fall 2007-- Summer 2008.
- Member, Undergraduate Programs Committee, Fall 2006 – Spring 2008.
- Member, (Substitute for Dr. Ram Tripathi) Committee of Graduate Council, Spring 2006, Spring 2008, Fall 2015.
- Member, Graduate Programs Committee, a subcommittee of the Curriculum and Programs Review Committee, Fall 2005 – Spring 2006.
- Member, Search Committee for a faculty position in Statistics in 2008.
- Member, Search Committee for a faculty position in Statistics in 2006.
- Member, Dean's Assistant Professor Council, 2005- 06.
- Member, Search Committee for a faculty position in Statistics in 2005.
- Organizer of the departmental Bi-Weekly seminar series, Aug 2004- May 2006.
- Member, Search Committee for two faculty positions in Statistics in 2003.

18. CONSULTING ACTIVITIES:

- Providing Statistical Consulting Service to Department of Biomedical Engineering, the University of Texas at San Antonio, TX, 2011- 2012.

- Provided Statistical Consulting Service to Medical Center Ophthalmology Associates, San Antonio, TX, 2011.

- Provided Statistical Consulting Service to SBScibus (formerly Strategic Bovine Services and Cattle Production Consultants), Australia, 2011.

- Provided Statistical Consulting Service to North Coast Cancer Institute, New South Wales, Australia and University of New South Wales, Coffs Harbour, Australia, 2008- 2009.

- Provided Statistical Consulting Service to Department of Radiation Oncology, Graduate Program in Human Imaging, Division of Radiological Sciences, University of Texas Health Science Center at San Antonio, San Antonio, TX, 2008- 2009.

- Provided Statistical Consulting Service to Department of Kinesiology, The University of Texas at Austin, Austin, TX, 2006- 2007.

- Provided Statistical Consulting Service to Hyperion Biotechnology, Inc, San Antonio, TX, 2006.

- Provided Statistical Consulting Service to United States Air Force School of Aerospace Medicine at Brooks AFB, TX, 2002- 2005.

- Statistical consultant for an animal use protocol entitled "Long-acting EPO (Darbepoietin) for protection against laser-induced battlefield injuries to the retina." Consult provided to US Air Force School of Aerospace Medicine, Hyperbaric Medicine Division, 2004.
- Statistical consultant for an animal use protocol entitled "Evaluation of efficacy of probiotic treatment on infected full-thickness dermal wounds in the pig (Sus Scrofa)." Consult provided to US Air Force School of Aerospace Medicine, Hyperbaric Medicine Division, 2004.

- Provided Statistical Consulting Service to Department of Psychology, the University of Texas at San Antonio, TX, March 2004- Sep 2004.

- Provided Statistical Consulting Service to Department of Mechanical Engineering and Biomechanics, the University of Texas at San Antonio, TX and to Department of Orthopaedics, University of Texas Health Science Center at San Antonio, San Antonio, TX, 2003- 2009.

19. REVIEWS/REFEREE:

Journal Reviews:

- *Journal of the Royal Statistical Society – Series B*
- *Journal of the Royal Statistical Society – Series C*
- *Journal of Statistical Planning and Inference*
- *Journal of Multivariate Analysis*
- *Computational Statistics and Data Analysis*
- *Communications in Statistics- Theory and Methods*
- *Communications in Statistics- Simulation and Computation*
- *Metrika*
- *Statistical Methodology*
- *The American Statistician*
- *Journal of Statistical Computation and Simulation*
- *Pattern Recognition Letters*
- *International Journal of Ecological Economics & Statistics*
- *African Journal of Mathematics and Computer Science Research*
- *Journal of Data Analysis and Operations Research*
- *Statistics & Probability Letters*
- *Journal of Applied Statistics*

Book Reviews:

- Negative Binomial Regression, 2nd Edition, by Joseph M. Hilbe, (2012), Cambridge University Press, UK, *International Review of Economics and Finance*, 22(1), 305.

- Intelligent Decision Support, Handbook of Applications and Advances of the Rough Sets Theory, Edited by Roman Slowinski, (1993), Kluwer Academic Publishers, Netherlands, *OPSEARCH Journal*, Vol. 30(4), 368-371.

- Envisioning Information, by Edward R. Tufte, (1993) Graphics Press, Cheshire, Connecticut, U.S.A. *OPSEARCH Journal*, Vol. 30(3), 265-267.

Others:

- Special Issue of *EEST enhanced by the Workshop* held at Middle East Technical University, (2011) Turkey.
- Abstracts reviewed for the *workshop SDA2015: Symbolic Data Analysis* held at MAPMO Laboratory, CNRS-University of Orléan, France.

20. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

- International Statistical Institute
- International Indian Statistical Association (Life)
- American Statistical Association (San Antonio Chapter)
- Computational and Methodological Statistics on the following items:

1. GMS: General Methodological Statistics
2. MCS: Matrix Computations and Statistics
3. MSW: Multi-set and multi-way models

My favorite hobbies include gardening, traveling and high altitude trekking in the Indian Himalaya (received three gold medals from the Government of India). I also enjoy exploring the connections among different languages and among different cultures through costume, food and music.