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EDUCATION

Degree	Date	Institution	Area
Ph.D.	1980	Michigan State University	Statistics
M.S.	1977	Michigan State University	Statistics
Certificate	1976	Control Data Institute	Computer
B.S.	1973	College of Statistics, Tehran	Statistics

AREAS OF SPECIALIZATION AND/OR RESEARCH INTEREST

Covariance Estimation & High-Dim. Data Analysis,
Multivariate Statistics and Longitudinal Data Analysis,
Financial Data and Stochastic Volatility Models,
Time Series Analysis and Prediction Theory.

PROFESSIONAL EXPERIENCE

Rank	Institution	Date
Professor	Texas A&M University	2008-Pres.
Professor (visiting)	University of Chicago	Fall, 2014
Presidential Research Prof.	Northern Illinois University	2008-2009
Professor	Northern Illinois University	1989-2008
Professor (visiting)	University of Chicago	2001-2002
Director	Division of Statistics, NIU	1994-2001
Associate Professor	Northern Illinois University	1985-1989
Associate Professor (visiting)	University of California, Davis	1987-1988
Assistant Professor	Northern Illinois University	1981-1985
Assistant Professor (visiting)	University of N. Carolina, Chapel Hill	1984-1985
Graduate Assistant	Michigan State University	1976-1981

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Elected member of the International Statistical Institute (ISI)
Fellow of the American Statistical Association
American Mathematical Society

GRANTS AND AWARDS

- Visiting Scholar

  Department of Mathematics, Hiroshima University, March 2012.

  Department of Statistics, Pontificia Universidad Catolica de Chile, May 2011.

  Melbourne Business School, University of Melbourne, Australia, (May-June, 2009).

  Australian School of Business, University of New South Wales, Australia, (July, 2009).

  Department of Math., Hokkaido University, Japan (July-August 2005 and March, 2007)
  Department of Mathematics and Statistics, Kuwait University, Kuwait (May, 2004).

- Funded Proposals

  National Science Foundation, $120,000.00, 2016-2019, "Equilibrium for Nonstationary Multivariate Time Series."

  National Science Foundation, $120,000, "Sparse Graphical Models for Multivariate Time Series", 2013-2015.

  National Science Foundation, $195,000, "Generalized Linear Models for Large Correlation Matrices via Partial Correlations", 2009-2012.

  National Science Foundation, $60,000, "Model-Based Classification of Longitudinal and Functional Data", 2005-2007.

  National Science Foundation, $82,000, "Simultaneous Modelling of Several Large Covariance Matrices", 2003-2005.

  Northern Illinois University, Graduate School Grant, 2001.

  NSF-SCREMS (Scientific Computing Research Environments in Mathematical Sciences (1997-98) $75,000.

  National Security Agency (1996-1998), $42,000, "Topics on Non-Gaussian and Nonlinear Time Series."

  Air force Office of Scientific Research (1988-1991), $37,000, "Analysis of Non-Gaussian, Nonlinear Time Series with Long Memory."

National Science Foundation (1986-1989), $23,967, "Autoregressive Representation of Nonstationary Processes."

National Science Foundation (1983-1986), $18,000, "Cesaro Summability of the Linear Predictor of a Stationary Time Series."

Northern Illinois University, Graduate School Grant, 1983.

Northern Illinois University, Graduate School Grant, 1986.

Visiting Researcher Grant (Center for Stochastic Processes, Dept of Statistics, Univ. of North Carolina, Chapel Hill, 1984)

Travel Support (NSF and Amer. Stat. Assoc.) to attend the Century Session of the Inter. Statistical Institute, Amsterdam, 1985

Travel Support (ONR and National Academy of Sciences) to attend the Cutting Edge Workship on Time Series Analysis and Signal Processing, Austin and College Station, Texas, May 21 - June 3, 1986

-Some Unfunded Proposals

National Science Foundation, 2007-2010, $130,000, "Statistical Inference and Cholesky Models for Large Covariance Matrices."

National Science Foundation, 1994-1997, $76,350.00 "Nonlinear Prediction and Modeling of Nongaussian Time Series."

National Science Foundation, 1991-1994, $85,811.00 "Constrained Prediction of Singular Stationary Processes."

National Science Foundation, 1990-1992, $185,024, Jointly with G. Ammar and J. Ibrahim, "Computational and Statistical Problems in Time Series with Missing Observations."

National Science Foundation and ONR, 1986-1989, $53,228, "Analysis of Nongaussian, Nonlinear Time Series with Long Memory."

Office of Naval Research, 1982-1985, $42,022, Joint with N. Ebrahimi, "On Computing the Reliability of Stochastic Systems."

National Science Foundation, 1982-1984, $21,887, "On Strong Mixing of Vector-Valued Gaussian Stationary Processes."

PUBLICATIONS

-Books and Editorial Activities:

1. *High-Dimensional Covariance Estimation*, John-Wiley, 2013.

2. *Journal of Statistical Planning and Inference*, Vol. 140, December 2010, Guest Editor (with Richard Davis), Special Issue in honor of Emmanuel Parzen's 80th Birthday and Retirement from the Department of Statistics, Texas A&M Univ.

3. *Foundations of Time Series Analysis and Prediction Theory*, John-Wiley, 2001.

4. *Computing Science and Statistics*, 31, 2000, the Proceedings of the 31st Symposium on the Interface, Editor (with Ken Berk).

5. *Journal of Nonparametric Statistics* (1996, Vol. 6, Numbers 2-3, pp. 91-292) on "Nonparametric and Nonlinear Time Series: Theory and Methods," Guest-Editor.

-Articles:

1. A sampling theorem for multivariate stationary processes. *J. of Multivariate Analysis*, Vol. 13, No. 1 (1983), 177-185.

2. Exact factorization of the spectral density and its application to forecasting and time series analysis. *Comm. Statist. Theor. Math.* 12(18) (1983), 2085-2094.

3. Exact factorization of nonnegative polynomials and its applications. *Computer Science and Statistics* Proceeding of the 15th Symposium (ed. J.E. Gentle) 1983, 365-367.

4. On the mean convergence of the best linear interpolator of multivariate stationary stochastic processes, *Ann. of Probab.* 12 (1984), 609-614.

5. The Helson-Sarason-Szegö Theorem and the Abel summability of the series for the predictor, *Proc. of the Amer. Math. Soc.* 91 (1984), 306-308.

6. Taylor expansion of $\exp(\sum_{k=0}^{\infty} a_k z^k)$ and some applications, *The Amer. Math. Monthly*, Vol. 91 (1984), 303-307.

7. (with T.A. Hua) Tables of cumulative distribution functions and percentiles of the standardized stable random variables. *Comm. in Statist. Simul. and Comput.* Vol. 13 (1984), 571-601.

8. On minimality and interpolation of harmonizable stable processes. *SIAM J. on Applied Math.* 44 (1984), 1023-1030.

9. (with H. Salehi) On subordination and linear transformations of harmonizable and periodically correlated processes. Probability Theory on Vector Spaces III. Lecture Notes in Mathematics, No. 1080, (1984), 195-213.

10. A matricial extension of the Helson-Szegö Theorem and its application in multivariate prediction. *J. of Multivariate Analysis*, 16 (1985), 265-275.

11. Infinite order autoregressive representation of multivariate stationary processes. *International Statistical Institute*. Contributed papers, Book 2, (1985), 625-626.

12. On stationarity of the solution of a doubly stochastic model. *J. of Time Series Analysis*, 7 (1986), 123-132.

13. (with A.G. Miamee) Degenerate multivariate stationary processes: Basicity, past and future, and autoregressive representation. *Sankhya* 49 (Ser.A) (1987), 316-334.

14. Some properties of empirical characteristic functions viewed as harmonizable processes. *J. of Statistical Inference and Planning*, 17 (1987), 345-359.

15. Remarks on extreme eigenvalues of Toeplitz matrices. *Inter. J. of Math. Sci.*, 11 (1988), 23-26.

16. (with B.C. Arnold) Conditional characterizations of multivariate distributions. *Metrika*, 35 (1988), 99-108.

17. (with A.G. Miamee) Wold decomposition, prediction and parametrization of stationary processes with infinite variance. *Probability Theory and Related Fields*, 79 (1988), 145-164.

18. (with A.G. Miamee) Best approximation in $L^p(d\mu)$ and prediction problems of Szegö, Kolmogorov, Yaglom and Nakazi. *J. of London Math. Soc.*, 38 (1988), 133-145.

19. Infinite order autoregressive representations of multivariate stationary processes. *Probability Theory and Related Fields*, **80** (1988), 315-322.

20. Stationarity of the solution of $X_t = A_t X_{t-1} + \epsilon_t$ and analysis of nonGaussian dependent random variables. *J. of Time Series Analysis*, **9** (1988), 225-239.

21. On the convergence of finite linear predictors of stationary processes. *J. of Multivariate Analysis*, **30** (1989), 167-180.

22. Estimation and interpolation of missing values of a stationary time series. *J. of Time Series Analysis*, **10** (1989), 149-169.

23. Robust prediction of a multivariate stationary time series. *Sankhya (Ser. A)*; 52 (1990), 115-126.

24. ARMA approximations and representations of a stationary time series. *Sankhya (Ser. B).*; 54 (1992), 235-241.

25. (with A.G. Miamee) Computation of canonical correlation and the best predictable aspect of future for time series. *J. of Time Series Analysis*, 13 (1992), 345-351.

26. Fundamental roles of the idea of regression and Wold decomposition in time series. *IMA Volumes in Mathematics and its Applications*, Springer-Verlag, Vol. 45 (1992), 287-314.

27. Alternating projections and interpolation of stationary processes. *J. of Applied Probability*, 29 (1992), 921-931.

28. Toward Statistical Implementation of Prediction Theory: The Role of Convergence of Finite Predictors. Procceding of the workshop on Nonstationary Processes and Their Applications. A.G. Miamee (Ed), World Scientific (1992), 243-255.

29. (With R. Cheng) Baxter's Inequality and Convergence of Finite Predictors of Multivariate Stochastic Processes, *Probability Theory and Related Fields*, 95 (1993), 115-124.

30. (With R. Cheng) The mixing rate of stationary multivariate processes. *J. of Theoretical Probability*, (1993), 6, 603-617.

31. On relations between prediction error covariance of univariate and multivariate processes. *Statistics and Probability Letters*, 16 (1993) 355-359.

32. Two prediction problems and extensions of a theorem of Szegö. *Bull of Iranian Math. Soc.* 19 (1993), 1-12.

33. Canonical correlation and reduction of multiple time series. *Annals of Institute of Stat. Math.* 46 (1994) 625-631.

34. (With W. Chang, D. Weiss) An examination of the multiple time series properties of beta and its implications to multiple period portfolio risk. Advances in Investment Analysis and Portfolio Management, 3 (1995), 165-181.

35. (With A.G. Miamee) On prediction of nonsynchronized multivariate processes. *Bull. of Iranian Math. Soc.* (1995) 21, 33-44.

36. (With R. Mohanty) Estimation of the generalized prediction error variance of a multiple time series. *J. of the Amer. Statist. Assoc.*, 91, (1996) 294-299.

37. (With R. Cheng) Prediction with incomplete past and interpolation of missing values. *Statistics and Probability Letters* (1997) 33, 341-346.

38. (With T.C. Lin) Nonparametric and nonlinear models and data mining in time series: A case-study on the Canadian lynx data. *J. of Royal Statistical Soc. C (Applied Statistics)*, (1998) 47, 187-201.

39. (With A.G. Miamee and R. Cheng) Some extremal problems in L^p (w). Proc. of the Amer. Math. Soc., (1998) 126, 2333-2340.

40. (With T.C.Lin) Data mining, data perturbation and degrees of freedom of projection pursuit regression. *Computing Science and Statistics*, (1998) 29 (1), 164-168.

41. (With T.C. Lin and A. Schick) Nonparametric regression with time series errors. *J. of Time Series Analysis*, (1999) 20, 425-433.

42. Joint mean-covariance models with applications to longitudinal data, I: Unconstrained parametrization. *Biometrika*, (1999) 86, 677-690.

43. (With E. Soofi) Prediction variance and information worth of observations in time series. *J. of Time Series Analysis*, 21, (2000), 413-434.

44. Maximum likelihood estimation of generalized linear models for multivariate normal covariance matrix. *Biometrika*, (2000) 87, 425-435.

45. (With R. Cheng and A.G. Miamee) Regularity and minimality of infinite variance processes. *Journal of Theoretical Probability*, (2000) 13, 1115–1122.

46. Discussion of the paper *Parametric modelling of growth curve data: An overview*, by D. Zimmerman and V. Núñez-Antón. Test (2001), **10**, 1–79.

47. (with M. Daniels) Dynamic conditionally linear mixed models for longitudinal data. *Biometrics*, (2002) 58, 225-231.

48. Joint modeling of mean, dispersion and correlation: generalized Gaussian estimating equations. In: *Correlated Data Modeling*, D. Gregori, (ed.) (2002) 27-34, Franco Angeli, Milan, Italy.

49. (with M. Daniels) Dynamic models and Bayesian analysis of covariance matrices in longitudinal data. *Biometrika*, (2002) 89, 553-566.

50. Graphical diagnostics for modeling unstructured covariance matrices. *International Statistical Review*, (2002) 70, 395-417.

51. (with B. Tarami) Multivariate t autoregressions: Innovations, prediction variances and exact likelihood equations. *J. of Time Series Analysis*, (2003) **24**, 739-754.

52. (with R. Cheng, A.G. Miamee) On the geometry of $L^p(\mu)$ with applications to infinite variance processes. *Australian J. of Mathematics*, (2003) **74**, 35-42.

53. (with Wei B. Wu) Nonparametric estimation of large covariance matrices of longitudinal data, *Biometrika*, (2003) **90**, 831-844.

54. (with J. Huang, N. Liu and L. Liu) Covariance selection and estimation via penalized normal likelihood. *Biometrika*, (2006) **93**, 85-98.

55. (with M. Al-Rawwash) Gaussian estimation and joint modelling of dispersions and correlations in longitudinal data. *Computer Methods and Programs in Biomedicine*, (2006) **82**, 106-113.

56. (with M. Daniels and T. Park) Simultaneous modeling of several covariance matrices with application to the general location model. *J. of Multivariate Analysis*, (2007) **98**, 568-587.

57. (with A. Inoue and Y. Kasahara) A prediction problem in $L^2(w)$. *Proc. of the Amer. Math. Soc.*, (2007) **135**, 1233-1239.

58. Skew-normal time series models with nonlinear heteroscedastic predictors. Special Issue of *Comm. in Statist. - Theory and Method*, (2007) **36**, 1803-1819.

59. Construction of skew-normal random variables: Are they linear combination of normals and half-normals? *J. of Statistical Theory and Application*, (2007) **3**, 314-328.

60. Cholesky decompositions and estimation of a multivariate normal covariance matrix: Parameter orthogonality. *Biometrika*, 2007, **94**, 1006-1013.

61. Simultaneous modelling of covariance matrices: GLM, Bayesian and nonparametric perspectives. In: *Correlated Data Modelling 2004*, D. Gregori et al. (eds.), (2007), Franco Angeli, Milan, Italy.

62. Inference for Stationary Processes Using Banded Covariance Matrices, Functional Operatorial Statistics, S. Dabo-Niang and F. Ferraty (eds.), (2008), pp. 225-260, Physica-Verlag, Springer.

63. (with Y. Kasahara and A. Inoue) Duals of random vectors and processes with applications to prediction problems with missing values. *Statistics and Probability Letters*, (2009), 79, 1637-1646.

64. (with Wei B. Wu) Prediction of stationary processes using banded covariance matrices. *Statistica Sinica*, (2009), 19, 1755-1764.

65. (with M.Daniels) Modeling covariance matrices via partial correlations. *Journal Multivariate Analysis*, (2009), 100, 2352-2363.

66. Modeling covariance matrices: The GLM and regularization perspectives,*Stat. Sciences*, (2011), 26, 369-387.

67. (with M. Maddooliat and J. Z. Huang) Robust estimation of the correlation matrix of longitudinal data. *Statistics and Computing*, (2011), 23, 1-12.

68. (with P. Dellaportas) The Cholesky-GARCH models with application to finance. *Statistics and Computing*, (2012), 22, 849-855.

69. (with P. Kohli) Nonparametric estimation of the innovation variance and judging the fit of ARMA models.
Economic Time Series: Modeling and Seasonality (Refereed Volume, Ed. S. Holan et al.), (2012), 459-476.

70. (with P. Kohli and T. Garcia) Regressograms and mean-covariance models for incomplete longitudinal data. *The American Statistician*, (2012), 66, 85-91.

71. (with J. Huang, M. Chen and M. Maadooliat) A cautionary note on generalized linear models for covariance of unbalanced longitudinal data. *Journal of Statistical Planning and Inference*, (2012), 142, 743-751.

72. (with F. Ye, T. Garcia and D. Ford) Extension of a Negative Binomial GARCH Model: Analyzing the Effects of Gasoline Price and VMT on DUI Fatal Crashes in Texas.*Journal of Transportation Research*, (2012), 2279, 31-39.

73. (with M. Al-Rawwash) Gaussian estimation of regression and correlation parameters in longitudinal data,*Journal of the Association of Arab Universities for Basic and Applied Sciences*, (2013), 13, 28-34.

8

74. (with E. Li) An Alternative REML Estimation of Covariance Matrices in Linear Mixed Models, *Statistics and Probability Letters*, (2013) , 83, 1071-1077.

75. Discussion of the paper " Large covariance estimation by thresholding principal orthogonal complements" by Fan, Liao and Mincheva,*Journal of Royal Statistical Society B* (2013), 670-671.

76. (with L. Chen and M. Madooliat) Regularization of Multivariate Regression Models with Skew Errors, *Journal of Statistical Inference and Planning*, (2014), 149, 125-139.

77. (with P. Kohli) Some Prediction Problems for Stationary Random Fields with Quarter-Plane Past, *Journal of Multivariate Analysis*, (2014), 127, 112-125.

78. (with Xanthi Pedeli and K. Fokianos) Two Cholesky-log-GARCH models for multivariate volatilities, *Statistical Modeling*, (2015), 15, 233-255.

79. (with P. Kohli and T. Garcia) Linear models for Cholesky factors of covariance matrices of multivariate longitudinal data, *J of Multivariate Analysis*, to appear.

80. (with X. Wang) Distribution of random correlation matrices: Hyperspherical parametrization of the Cholesky factor, *Statistics and Probability Letters*, (2015), 106, 5-12.

81. (with A. Inoue and Y. Kasahara) The intersection of past and future of multivariate stationary processes, *Proc. of Amer. Math Soc.*, 144 (2016) 1779-1786.

82. (with Y. Kasahara and A. Inoue) Rigidity for matrix-valued Hardy functions, *Integral Equations and Operator Theory,* (2016),(84) 289-300.

83. (with S. Noorbaloochi) Multivariate time series analysis of neuroscience data: Some challenges and opportunities. *Opinion in Neurobiology,* 37, April 2016, 12-15.

84. (with R. Tsay) Modeling structured correlation matrices, *Biometrika* (2017), 104, 237-242.

85. (with S. Deb and Wei Biao Wu) An asymptotic theory for spectral analysis of random fields, *Electronic Journal of Statistics* (2017), 11, 4297-4322

86. (with R. Sundararajan) Stationary subspace analysis of nonstationary processes, *Journal of Time Series Analysis*, (2018), 39, 338-355.

87. (with Y. Kasahara and A. Inoue) Baxter's inequality and finite predictor coefficients for long-memory multivariate stationary processes, *Bernoulli Journal* (2018), 24, 1202-1232.

88. (with M. Aghashahi, R. Sundararajan and M.K. Banks,....) Water distribution systems analysis symposium-battle of the attack detection algorithms (BATADAL), ASCE *Journal of Water Resources Planning and Management*, to appear.

89. (with R. Sundararajan and M.A. Palma) (2017) Reducing brain signal noise in the prediction of economic choices: A a case study in neuroeconomics, *Frontiers in Neuroscience*.

90. (with R. Sundararajan) Nonparametric change point detection in multivariate piecewise stationary time series, *Journal of Nonparametric Statistics*, to appear.

91. (with K. E. Binder and J. W. Mjelde) The role of temporal dependence in factor selection and forecasting oil prices, *Empirical Economics*, to appear.

92. (with X. Kang, X. Deng and K. Tsui) Order-averaged Cholesky-GARCH models: Comparison of asset ordination methods, *Statistical Modeling*, submitted.

REVIEWS, ABSTRACTS and OTHERS

1. Book Review: *State-Space Methods for Time Series Analysis: Theory, Applications and Software*, by Jose Casals, Alfredo Garcia-Hiernaux, Miguel Jerez, Sonia Sotoca, A. Alexandre Trindade, CRC Press,*J of Time Series Analysis*, 2017.

2. Book Review: *Time Series Modelling with Unobserved Components* , by Matteo M. Pelagatti, CRC Press, *J of Time Series Analysis*, 2016.

3. Review of "Antedependence Models for Longitudinal Data", by D. Zimmerman and V. A. Nunez-Anton, *Journal of the American Statistical Association*, 2009, p. 765.

1. Review of "Regression Models in Time Series Analysis", by B. Kedem and K. Fokianos, *J. of Time Series Analysis*, 2005, 26, 784-785.

2. Review of "A Course in Time Series Analysis" by D. Peña, G. Tiao and R. Tsay, *American Statistician*, 2001, 56, p. 77.

4. (with W. Wu) Covariance Matrix Estimation for High Dimensional Data. Encyclopedia Environmetrics 2nd Ed, (2012).

3. Chicago - ASA's Kind of Town (with Kathleen Pecis), AMSTAT NEWS, 1996, No. 227, p.6.

4. Multivariate prediction theory and matricial Helson-Szego Theorem, AMS Abstracts, Vol. 3, No. 5, 1982, p. 349.

5. On strong mixing of vector-valued Gaussian stationary processes, AMS Abstracts, Vol. 3, No. 1, 1982, p. 112.

6. Helson-Sarason Theorem for Dirichlet algebras, Abstracts AMS, Vol. 2 (1981), p. 304.

7. On subordination of harmonizable sequences (with H. Salehi), IMS Bull, Vol. 10 (p. 31), January 1981.

8. A sampling theorem for q-variate stationary processes, IMS Bull. Vol. 10 (p. 31), January 1981.

OTHER PROFESSIONAL INFORMATION

-Member of Editorial Boards:

> *Bernoulli Journal* (2016-Present.)
> *Journal of the American Statistical Assoc. (JASA)* (2014-Present).
>
> *Journal of Business and Economics Statistics* (2012-2014).
> *Electronic Journal of Statistics* (2010-2012).
> *Statistics and Probability Letters* (2008-2014).
> *Journal of the Iranian Statistical Society* (2006-2014)
> *Jordanian Journal of Mathematics and Statistics* (Advisory Board, 2007-2014).
> *Journal of Applied Mathematics and Stochastic Analysis* (2005-2009).

-Member of Board of Directors of IFNA (Interface Foundation of North America, Computing Science and Statistics), 2000-2005.

-Sessions Organized and Work at National and International Meetings:

1. Chair of the organizing committee for the 2012 NSF-NBER Conference on Time Series Analysis, Texas A&M University (Oct. 26-27).

2. Member of the International Organizing Committee of the Workshop on Correlated Data Modeling, Torino, Italy, 2004.

3. Co-chair (with Ken Berk) of the 31st Symposium on the Interface: Computing Science and Statistics, June, 1999, Schaumburg, IL

4. Organizer of the Longitudinal Data Analysis Workshop, DeKalb, IL, Nov. 6-7, 1997.

5. Chair of the Local Arrangements Committee (LAC) for the joint statistical meetings in Chicago in August 1996.

6. Organized a Special Invited Session on "Stochastic Processes," AMS Regional Meeting, DeKalb, IL, May 1993.

7. Organized a Special Invited Session on "Probability and Prediction Theory," AMS Regional Meeting, South Bend, March 1991.

-Reviews:

   Reviewer for the National Science Foundation
   Reviewer for Mathematical Reviews
   Refereed manuscripts for many statistics and mathematics journals
   Reviewed books for IEEE Press, John-Wiley, Springer-Verlag, Chapman Hall.

TEACHING AND STUDENT SUPERVISION

-Courses Taught at Texas A&M University:

   STAT 303 Statistical Methods, Fall and Spring, 2012
   STAT 626 Methods of Time Series Analysis, Summer 2012-2017

   STAT 674 Time Series Analysis II, Spring 2009, 11, 15, 17
   STAT 673 Analysis of Time Series I, Fall 2010
   STAT 612 Theory of Linear Models, Fall 2010, 11, 12
   STAT 689, Missing Data in Longitudinal Studies, Spring 2010
   STAT 414, Mathematical Statistics, Fall 2008

-Some Courses Taught at Northern Illinois University:

   STAT 478, Time Series and Forecasting, Fall 2007
   STAT 573, Linear Models, Spring 2007
   STAT 675, Data Mining and Clustering, Spring 2006
   STAT 578, Financial Time Series, Spring 2005
   STAT 565, Advanced Regression Analysis, Summer 2001 & 2007
   STAT 591, Statistical Consulting, Spring 2001
   STAT 472, Mathematical Statistics, Spring 2001
   STAT 575, Multivariate Methods, Fall 2000 & Fall 2006
   STAT 474, Methods of Statistics, Fall 1999
   STAT 350, Probability and Statistics, Spring 1999
   STAT 593, Longitudinal Data Analysis, Fall 1997
   STAT 578, Advanced Time Series, Spring 1996
   STAT 208, Elementary Statistics, Fall 1996

-Short Courses:

   Taught a Chautauqua short course on the "Gambler's Ruin Problem and Computational Probability" for instructors from four-year colleges, NIU, June 10-12, 1993.

A SIGMA XI lecture on "On Being Fair and the Gambler's Ruin Problem" was given at NIU, March 1, 1995.

JSM 2017, "High-Dimensional Covariance Estimation & Portfolio Selection."

-Student Supervision:

1. Kathleen A. Gutowski (1985), M.S.
   Thesis: Comparison of Powers for Wilcoxon and Empirical Characteristic Function Based Symmetry Tests.

2. Radha Mohanty (1992), Ph.D. (NIU), (Monsanto Co.)
   Dissertation: Estimation of Prediction Error Variance of a Multivariate Time Series.
   See item #36 under my publications.

3. Tsair-Chuan Lin (1996), Ph.D. (NIU), (National Taipei University, Taiwan)
   Dissertation: Nonparametric Regression with Time Series Errors.
   See items #38, 40 and 41 under my publications.

4. Bruce R. Havel (1996), M.S.
   Thesis: Simulation of Dependent Binary Data.

5. Mohammad Al-Rawwash (2001), Ph.D.(NIU), (Yarmuk University, Jordan)
   Dissertation: Gaussian Estimation and Modeling Covariance in Longitudinal Data.
   See item #55 under my publications.

6. Julie Banks (2002), M.S.
   Thesis: An Application of Multiple Imputation in Linear Regression Analysis.

7. Xuegang Xia (2008), M.S.
   Thesis: Nonlinear Time Series Models and Their Embedding Dimensions.

8. Beibei Hu (2008), M.S.
   Thesis: Random Correlation Matrices and Relative Efficiency in Generalized Estimating Equations.

9. Lianfu Chen (2011), Ph.D. (TAMU),
   Dissertation: Regularization of Parameters in Multivariate Linear Regression.

10. Priya Kohli (2012), Ph.D. (TAMU), (Connecticut College)
    (Co-adviser, Willa Chen)
    Dissertation: Prediction of Stationary Random Fields.

11. Ranye Sun (2014), Ph.D. (TAMU), (Bank of America).
    Dissertation: Reduced Rank Multivariate Regression and Generalized Matrix Decomposition using Thresholding Methods.

12. Xiao Wang (2017),Ph.D. (TAMU).
    Dissertation: Dynamic Orthogonal Subseries for High-Dimensional Nonstationary
    Time Series

- Served on M.S. and Ph.D. Committees of about 15 students in the Departments of
  Mathematical Sciences, Biology, Economics and the College of Education.

- Post-doctoral Students

    1. Dr. Bahram Tarami, Shiraz University, Iran, 1999-2000.
    2. Dr. Yukio Kasahara, Tokyo University (Summer 2004); Hokkaido University
       (Summer 2006)

- External Examiner

1. Swaminathan, V. Shri (1999), Ph.D., Department of Statistics, University of Pune,
   India.
   Thesis: On Statistical Inference for Stochastic Processes in Random Environments.

2. Al-Saber, R. Ahmed (2006), M.S. Department of Mathematics, Statistics and Opera-
   tions Research, Kuwait University, Kuwait.
   Thesis: Quantifying Expert Knowledge about a Logistic Regression for Modeling Air
   Pollution.

3. Savvides, Alexios (2008), Ph.D., Department of Mathetmatics and Statistics, Univer-
   sity of Cyprus, Cyprus.
   Thesis: Comparison and Clustering of Several Spectral Densities.

-Curriculum Development, Advising and Others:

   Served on the Statistics Curriculum Committee (1985-1986), which was charged
   to restructure and modernize the upper-division and graduate courses in statistics.

   Chair of the committee to develop curriculum for statistics emphasis in Ph.D.
   program in mathematical sciences (1990-1991).

   Undergraduate and Graduate advisor, Division of Statistics, 1990 to 1994.

   Introduced S-PLUS in teaching graduate STAT courses, 1992. Now it is used
   routinely in our program.

Introduced GASP (Graphical Aids for Stochastic Processes; an educational software package) in teaching upper-division STAT courses, 1993.

Introduced "Against All Odds: Inside Statistics," in teaching service and upper-division STAT courses, 1993. This is a collection of educational videos developed by the Consortium for Mathematics and Its Applications (COMAP) and was first shown on PBS.

Organized two workshops on "Internship and Career Developments" for STAT majors, February 1995, 1996.

-Nominated twice for the NIU Presidential Teaching Professorship Award (96,01)

SERVICE, CONSULTING, SEMINARS & CONFERENCES

-Service on University Committees (NIU):

Provost's Steering Committee on Salary Equity (2007-2008)
CLAS Dean Search Committee (2006-2007)
Internship and Co-Op Faculty Advisory Board, 1996-2001
College of LA&S Senate, 1994-2001
University Council and Faculty Senate (1993-94), elected
College Council (1992-94), elected
The Library Advisory Committee (1990-93), appointed
Advisory Council of Division of Statistics (1992-93), elected
Personnel Committee of Division of Statistics
Personnel Committee of Department of Math Sciences, elected
Advisory Committee of Department of Math Sciences, elected
Graduate Studies Committees of Department of Math and Division of Statistics

-Statistical Consulting:

In addition to the usual consulting on campus, I have been engaged in statistical consulting for the following institutions:

DeKalb Genetics, Inc.
Monsanto
Kemper Reinsurance Company
Slp Info Ware
DePaul University, Center for Community Research
Kable News Company

-Colloquium Talks at Universities:

Michigan State University, East Lansing, 1981
University of Wisconsin, Milwaukee, 1982
University of North Carolina, Chapel Hill, 1984
University of Illinois at Chicago, 1984
University of Wisconsin, Madison, 1984
Colorado State University, Fort Collins, 1985
University of Chicago, 1987
University of California, Davis, 1987
University of Hampton, Virginia, 1989
University of Illinois, Urbana, 1992
Bloomsburg University, Pennsylvania, 1992
Sharif University of Technology, Tehran 1993
University of Illinois at Chicago, 1993
University of Kent at Canterbury, England, 1994
Purdue University, West Lafayette, 1994
Illinois State University, Normal, 1994
Shiraz University, Shiraz, 1994
Hampton University, 1995
Indiana University, Bloomington, 1995
Michigan Technological University, 1996
Marquette University, Milwaukee, 1997
Colorado State University, 1998.
University of Iowa, 1999.
University of Illinois, Chicago, 2000.
Keele University, UK, 2000.
Amir Kabir University, Iran, 2000.
Univeristy of Manchester, UK, 2001.
University of Chicago, 2002.
Bowling Green State University, OH, 2002.
University of Pennsylvania, PA, 2002.
University of Illinois, Urbana, 2003.
Kuwait University, Kuwait, 2004.
University of Missouri, Columbia, 2004.
Hokkaido University, Japan, 2005.
Michigan State University, Nov. 2005.
University of Illinois at Chicago, Nov. 2005.
University of Wisconsin, Madison, 2006.
Northwestern University, 2006.
University of Manchester, UK, 2006.
Northern Illinois University, 2007.
University of Iowa (Biostatistics), 2007.

Peking University, Beijing, China, 2007.
Michigan State University, Jan. 2008.
University College London, Feb. 2008.
Texas A & M University, Feb. 2008.
University of Cyprus, Feb. 2008.
University of Texas, San Antonio, Feb. 2009.
University of Melbourne, Australia, May 2009.
University of Sydney, Australia, July, 2009.
Australian National University, July, 2009.
University of New South Wales, July, 2009.
Rice University, November, 2009.
University of Munich, Germany, May 2010.
Pontificia Universidad Catholica De Chile, May, 2011.
University of Chicago, August, 2011.
Hiroshima University, March, 2012.
National Taipei University, December, 2012.

Workshop on Financial Statistics,
University of Chicago, September, 2014.

Temple University, October, 2014.

University of Manchester, UK, October, 2015.
University of Waterloo, Canada, October, 2015.
University of Texas, Dallas, November, 2015.
Texas A&M University, January, 2016.
Waseda University, Japan, February, 2017.
Keio University, Japan, March, 2017.
Cornell University, May, 2017.
Binghamton University, May, 2017.
University of Texas, El Paso, November 2017.

-Talks Given at National Meetings:

Invited talk at the 209th Meeting of IMS, Davis, CA, June 1989.
Invited talk at the IMA Workshop on "New Directions in Time Series
    Analysis." Minneapolis, MN, July 1990.
Invited talk at AMS-IMS-SIAM conf. on "Theory and Applications of
    Multivariate Time Series Analysis," July 1991, Seattle, WA.
Invited talk at the NASA/Hampton University Workshop on "Nonstationary

Processes and Their Applications.", Aug. 1-2, 1991.

Invited talk at AMS Regional Meeting, South Bend, IN, March 1991.

Invited talk at AMS Regional Meeting, Bethleham, PA, April 1992.

Invited talk at the Workshop on "Cyclostationary Signals", Yountville, CA, Aug. 16-18, 1992.

Discussant of the session "Inference for Covariance Matrices," Joint Statistical Meetings, August, 1999, Baltimore.

About 15 talks given at various meetings of IMS, ASA, AMS, etc.

Joint Statistical Meetings, Atlanta, USA, August 2001.

ENAR Meeting, Alexandria, VA, March 2002.

Chicago Chapter of ASA, April 2002.

WNAR Meeting, Flagstaff, AZ, June 2006.

SAMSI Opening Workshop on High-dimensional Random Matrices, NC, September 2006.

SAMSI Bayesian Focus Week, NC, November 2006.

Workshop on Applied Probability and Time Series (in honor of Peter Brockwell's retirement), Fort Collins, CO, June 2007.

-Talks Given at International Meetings:

Sixth International Symposium on Multivariate Analysis, Pittsburgh, PA 1983

Century Session of the International Statistical Institute, Amsterdam, 1985

Cutting Edge Workshop on Time Series Analysis and Signal Processing, College Station Texas, 1986

IMA Workshop on "Robustness, Diagnostics, Computing and Graphics in Statistics." Minneapolis, MN, 1989.

IMA Workshop on "New Directions in Time Series Analysis." Minneapolis, MN, 1990.

Twenty-fourth Annual Mathematics Conference, Shadid Beheshti Univ., Iran, March 1993.

International Conf. on "Combinatorics, Statistics, Pattern Recognition and Related Areas," Mysore, India, Dec. 28-30, 1998.

Workshop on Modeling Correlated Data, Trieste, Italy, Oct., 1999

AMS-IMS-SIAM 1999 Summer Conference on "Structured Matrices in Operator Theory, Numerical Analysis, Control, Signal and Image Processing", June 27-July 1, Boulder, CO.

Workshop on Current Developments in Time Series, Rhodes, Greece, May 2002.

Workshop on Modeling Correlated Data, Torino, Italy, January 2004.

International Conference on Distribution Theory, Santander, June 2004.

Statistics in Health Sciences, Nantes, France, 2004.

Workshop on Skew-Elliptical Distributions, CIMAT, Mexico, December 2004.

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Workshop on Nonlinear and Nonparametric Time Series, Kaiserslautern,
   Germany, 2005.
Interdisciplinary Mathematical & Statistical Techniques, Shanghai, China,
   May 2007.
The 1st International Workshop on Functional and Operatorial Statistics, Toulouse,
   France, June 2008.
IV International Skew Normal Workshop in Honour of Adelchi Azzalini's 60th
Birthday.
Santiago, Chile, May, 2011.
International Chinese Statistical Association (ICSA) Meeting on Applied Statis-
tics.
New York City, June, 2011.
NSF-NBER Workshop on Time Series, Michigan State University,
E. Landing, MI, September, 2011.
5th CSDA International Conf. on Computational Statistics.
London, England, December, 2011.
Recent Advances in Time Series Analysis (RATS 2012), Cyprus, June 2012.
Workshop on Frontiers of Statistics, Academia Sinica, Taiwan, December, 2012.

-Some Meetings Attended:

Directions in Time Series, IMS Meeting, Ames, Iowa, May 1977
Real Analysis Symposium, E. Lansing, Michigan, June 1980
AMS and IMS Meeting, Ann Arbor, Michigan, August 1980
Conference on Teaching of Statistics and Statistical Consulting,
   Columbus, OH, November 1980
Conference on Harmonic Analysis, University of Chicago, March 1981
AMS Annual Meeting, Cincinnati, OH, 1982
A mini conference on Probability and Harmonic Analysis, Bloomington,
   IN, 1982
AMS Meeting, Madison, Wisconsin, 1982
AMS Meeting, College Park, Maryland, 1982
Sixth International Symposium on Multivariate Analysis, Pittsburgh, PA, 1983
AMS Summer Meeting, Albany, NY, 1983
Inference for Stochastic Processes, Lexington, KY, 1984
Inference for Semimartingale Type Processes, Johns Hopkins University,
   Maryland, 1984
Century Session of the International Staistical Institute, Amsterdam, 1985
Cutting Edge Workshop on Time Series and Signal Processing, Texas, 1986
Joint Statistical Meeting of IMS and ASA, Chicago, IL 1986
Joint Statistical Meeting of IMS and ASA, San Francisco, CA, 1987

IMS Annual Meeting, Fort Collins, CO, 1988.

IMS Regional Meeting No. 209, Davis, CA, June 1989.

IMA Workshop on "Robustness, Diagnostics, Computing and Graphics in Statistics." Minneapolis, MN, Aug. 1989.

IMA Workshop on "New Directions in Time Series Analysis." July 1990.

AMS-IMS-SIAM Conf. On "Theory and Applications of Multivariate Time Series Analysis." July 1991, Seattle, WA.

NASA/Hampton University Workshop on "Nonstationary Processes and Their Applications." Aug. 1991.

AMS Regional Meeting, South Bend, IN, March 1991.

AMS Regional Meeting, Bethleham, PA, April 1992.

Workshop on "Cyclostationary Signals.", Yountville, CA, Aug. 1992.

24th Annual Iranian Mathematics Conference, Tehran, Iran, March 1993.

AMS Regional Meeting, DeKalb, IL, May 1993.

IMA Workshop on "Mathematics of Finance." Minneapolis, MN, June 1993.

Annual Argonne Nat. Lab. Workshop on Wavelets and Image Reconstruction, 1994.

NSF-NBER Seminar on Time Series, at various locations, 1990-2017.