CURRICULUM VITAE of
SHAN SUN

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Education:

Ph.D. in Statistics: Indiana University, Bloomington (May, 1992)

M.S. in Statistics: Indiana University (May, 1989)

B.S. in Applied Mathematics: Tongji University, Shanghai, China, August 1982

Working Experience:

- 1992--1994: Assistant Professor (tenure-track), James Madison University, Harrisonburg, Virginia.
- 1994--1998: Assistant Professor (tenure-track), Texas Tech University, Lubbock, Texas.
- 1998-1999: Mathematical Statistician, Quantitative Methods and Research, Office of Biostatistics, Center for Drug Evaluation and Research, Food and Drug Administration.
- 1999--2005: Associate Professor (with tenure), Texas Tech University, Lubbock, Texas.
- 2005—2006: Professor, Texas Tech University, Lubbock, Texas
- 2006-2007: Mathematical Statistician, Oncology Drug, Office of Biostatistics, Center for Drug Evaluation and Research, Food and Drug Administration.
- 2007-current: Professor, University of Texas at Arlington, Arlington, Texas

Visiting Appointments:

1. Research Fellow, Katholieke Universiteit, Nijmegen, The Netherlands. May 1992.
2. Research Fellow, Universität Gäottingen, Gäottingen, Germany. June--July 1992.

3. Research Associate, Indiana University, Bloomington. June-July 1993.

4. Research Fellow, Australia National University, Canberra, Australia, July 1996.

5. Research Fellow, Australia National University, Canberra, Australia, June—August 1997.

6. Research Fellow, Australia National University, Canberra, Australia, June--July 1999.

Publications:

1. Necessary and Sufficient Conditions for the Asymptotic Normality of Perturbed Sample Quantiles (with S. Ralescu). *J. Statist. Plann. Inference.* 35 (1993) 55-64.

2. Asymptotic Behavior of the Perturbed Empirical Distribution Functions Evaluated at a Random Point for Absolutely Regular Sequences. *Journal of Multivariate Analysis*. 47 (2) (1993) 230-249.

3. Asymptotics of the Perturbed Sample Quantile for the Sequence of *m*-dependent Stationary Random Process (with M. Puri). *Statistical Sciences and Data Analysis. Proceedings of the Third Pacific Area Statistical Conference.* Tokyo, Japan. (1993) 415-426.

4. Limiting Behavior of the Perturbed Empirical Distributions Evaluated at a Random Point under Dependence (with C.A. van Zuijlen). *Mathematical Methods of Statistics*. vol. 3, no. 2, (1994) 149-162.

5. Central Limit Theorem of the Perturbed Sample Quantiles for a Sequence of *m*-dependent Nonstationary Random Process. *Theory of Probability and Its Applications*. vol. 40, no 1, (1995) 143-158.

6. Nonparametric Methods for Stratified Two-Sample Designs with Application to Multi Clinic Trials (with E. Brunner and M.L. Puri). *Journal of American Statistical Association*. vol. 90, no. 431, (1995) 1004-1014.

7. Perturbed Empirical Distribution Functions and Quantiles under Dependence. *Journal of Theoretical Probability*. vol.4. no. 4. (1995) 763-777.

8. Function Approximation and Neural-Fuzzy Approach to Machining Process Selection. (with Samuel H. Huang, Hong-Chao Zhang and Hua H. Li) *IEEE Transactions on Components, Packaging, and Manufacturing Technology Part A* (1995) vol.18, no.4. 9-18.

9. Characterization of Weak Convergence for Perturbed Empirical and Quantile Processes Under Phi- Mixing (with H.J.A. Degenhardt, Madan L. Puri and Martien van Zuijlen). *J. Statist. Plann. Inference.* (1996) vol.53, no.3, 285-295.

10. Limiting Behavior of the Perturbed Empirical Distribution Functions Evaluated at U-statistics for Strongly Mixing Sequences of Random Variables. (with Ching-Yuan Chiang). *J. of Applied Mathematics and Stochastic Analysis.* (1997) vol.10, no.1 3-20.

11. Spatial-Temporal Prediction for Video Data Compression. (with Hua Li.) *Video Data Compression for Multimedia Computing, Statistical Based and Biologically Inspired Techniques.* Kluwer Academic Publishers, (1997) 95-120.

12. Motion Vector Prediction based on Frame Differences. (with Hua Li.) *Video Data Compression for Multimedia Computing, Statistical Based and Biologically Inspired Techniques.* Kluwer Academic Publishers. (1997), 395-418.

13. *Video Data Compression for Multimedia Computing, Statistical Based and Biologically Inspired Techniques.* (edited book with Hua Li and Haluk Derin,) Kluwer Academic Publishers (1997).

14. A Class of Adaptive Distribution-Free Procedures. *J. Statist. Plann. Inference.* (1997) vol.59 191-211.

15. Statistical Fuzzy PID Controller Design (with H. Li and B. Vaidhyanathan.) *Proceedings of the IEEE International Conference on Fuzzy Systems.* (refereed) (1997) vol.3, 1499-1504.

16. Monte Carlo Approximation to Edgeworth Expansions (with Peter Hall and Michael A. Martin). *Canad. J. Statist.*, 27 (1999) no.3, 579-584.

17. Trajectory Planning with Smoothing Splines. (with Egerstedt, Magnus and Martin, Clyde.) (1999) *Proceedings of IFAC99,* Beijing, China.

18. Control Theoretic Smoothing Splines. (with Egerstedt, Magnus and Martin, Clyde.) *IEEE Trans. Aut. Control.* (2000) 45 , no. 12, 2271-2279

19. Optimal Control, Statistics and Path Planning. (with Martin, Clyde and Egerstedt, Magnus). *Mathematical and Computer Modelling.* (2001) no.33, 237-253.

20. Smooth Quantile Processes from Right Censored Data and Construction of Simultaneous Conference Bands. (with Yanqing Sun and Yuanan Diao.) *Communication in Statistics, Theory and Methods.* 30 (2002) *no.4, 707-727*

21. Phase IIa Chemoprevention Trial of Green Tea Polyphenols in High-Risk Population of Liver Cancer: I. Design, Clinical Outcome, and Baselin Biomarker Data. *International J. of Cancer Prevention*. Shan Sun et al., (2004) vol. 1, *no. 4, 269-280*

22. Smooth Quantile Estimators under Strong Mixing: Necessary and Sufficient Conditions on Bandwidth for Weak Convergence. (with Minerva Cordero.) *J. Statist. Plann. Inference*. 128 (2005), 397-409.

23. Variance Reduction in Hazard Function Estimation, (with Peng Liang and Ming-Yen Cheng). *International Journal of Statistics and Systems.* (2006) 1(1), 87-110, 2006.

24. Bandwidth Selection for Kernel Quantile Estimation, (with Ming-Yen Cheng). *Journal of the Chinese Statistical Association* (2006), 44, 271-295.

25. Comparisons between Local Linear Estimator and Kernel Smooth Estimator for a Smooth Distribution Based on MSE under Right Censoring (with Liang Peng), (2008). *Communication in Statistics - Theory and Methods* 36, 297-312

26. Variance Reduction in Smoothing Splines, (with Robert Paige and Keyi Wang). *Scandinavian Journal of Statistics**, (2009)*** Vol. 36, no 1**.** 112-126.

27. Cumulative Distribution Estimation via Control Theoretic Smoothing Splines, (with Janelle Charles and Klyde Martin), *Springer Edited Collection: Three Decades of Progress in Control Sciences*, p 83-92, 2009.

28. Temsirolimus as Treatment for Advanced Renal Cell Carcinoma, (with Virginia Kwiatkowski et al.,) (2010), *The Oncologist* 15:428-435

29. Convergence in Bayesian Posterior Distributions, (with K. Gillies, C. Marti, and R. Martin), *Proceedings of the 19th International Symposium on Mathematical Theory of Networks and Systems*. MTNS 2010, 5-9 July, 2010. Budapest, Hungry

30. Variance Reduction for Kernel Estimators in Clustered/Longitudinal Data Analysis, (with Ming-Yen Cheng, Robert Paige, and Ke Yan). *Journal of Statistical Planning and Inferences.* 140 (2011), 1389-1397

31. Recursively Generated Control Theoretical Splines for on-the-fly Curve Approximation. (with Clyde Martin) 2013. *Proceeding* of *59th World Statistics Congress, Hong Kong*

Graduate Students

20 Master's students and 4 Ph.D students