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Department of Industrial & Manufacturing Systems Engineering (IMSE)
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Education

- Ph.D. Operations Research, Cornell University, 1993 (Advisor: David Ruppert)
- M.S. Operations Research, Cornell University, 1991
- B.S. Mathematical Sciences, The Johns Hopkins University, 1988

Professional Experience

- 2010 – present Professor, The University of Texas at Arlington
- 2008 – present Director, COSMOS, The University of Texas at Arlington
- 2002 – 2010 Associate Professor, The University of Texas at Arlington
Industrial & Manufacturing Systems Engineering
- 2001 – 2002 Visiting Professor, The University of Texas at Arlington
Information Systems & Operations Management
- 2001, 2003 (summer) Visiting Professor, University of Genoa, Italy
Communications, Computer & System Sciences
- 1993 – 2001 Assistant Professor, The Georgia Institute of Technology
Industrial & Systems Engineering
- 1996 Visiting Professor, Iowa State University, Statistics
- 1992, 1994 (summer) Lecturer, Cornell University, Operations Research

Grants and Contracts, as PI or Co-PI

- “Capital Portfolio Optimization and SNCR Integration,”
Joint with J. M. Rosenberger (PI), E. L. Prater, M. L. Sattler, and J. D. Diltz,
Luminant Power, \$50,000 (25% V. Chen), 2010.
- “IEECI: Engineering Sustainable Engineers,”
Joint with M. L. Sattler (PI), K. Alavi, S. P. Mattingly, K. J. Rogers, Y. P. Weatherton
National Science Foundation EEC-0935202, \$150,000 (16% V. Chen), 2009–11.
- “Multivariate Process Monitoring and Detection Tool for POC Equipment/Process
Monitoring.” Joint with S. B. Kim, D. E. Levine, and J. M. Rosenberger,
Luminant Power, \$100,000 (25% V. Chen), 2009–10.
- “Transferring SCR Management Software to Luminant.”
Joint with J. M. Rosenberger (PI), and M. L. Sattler,
Luminant Power, \$100,000 (25% V. Chen), 2009–10.
- “Center for Renewable Energy Science & Technology (CREST).”
Joint with UTA faculty in the Colleges of Science and Engineering,
Department of Energy, V. Chen portion \$103,415, 2008–09.

Grants and Contracts, as PI or Co-PI (continued)

- “GOALI: Statistically Parsimonious Adaptive Dynamic Programming for Minimizing the Environmental Impact of Airport Deicing Activities.”
Joint with B. L. Huff, S. B. Kim, J. M. Rosenberger, and D. Bergman,
National Science Foundation ECCS-0801802 and Dallas-Fort Worth International Airport,
\$301,967 NSF + \$114,866 DFW (35% V. Chen), 2008–12.
- “Refinement of a Data-Driven Optimization Prototype for Minimizing the Environmental Impact of Airport Deicing Activities.”
Joint with S. B. Kim (PI), B. L. Huff, and J. M. Rosenberger,
Dallas-Fort Worth International Airport, \$100,000 (25% V. Chen), 2008–09.
- “Optimizing Coal Plant NO_x Emissions at Luminant.”
Joint with J. M. Rosenberger (PI), S. B. Kim, and M. L. Sattler,
Luminant Power, \$100,000 (25% V. Chen), 2008–09.
- “Real-Time Multivariate Process Monitoring and Diagnostic Tool for POC Equipment/Process Monitoring.” Joint with S. B. Kim (PI) and J. M. Rosenberger,
Luminant Power, \$100,000 (25% V. Chen), 2008–09.
- “Coal Plant Emissions Management at TXU Power.”
Joint with J. M. Rosenberger (PI), H. W. Corley, and S. B. Kim,
TXU Power, \$100,000 (25% V. Chen), 2007–08.
- “Multivariate Process Monitoring and Fault Identification.”
Joint with S. B. Kim (PI), TXU Power, \$84,200 (50% V. Chen), 2007–08.
- “Assessing Control Strategies for Ground Level Ozone.”
Joint with M. L. Sattler (PI), TXU Energy, \$57,822 (50% V. Chen), 2006–2008.
- “Optimization and Simulation for Nurse Assignment.”
Joint with J. M. Rosenberger (PI) and D. Buckley-Behan,
Robert Wood Johnson Foundation, \$129,212 (25% V. Chen), 2005–07.
- “Statistical Modeling and Management of the Environmental Impact of Airport Deicing Activities.” Joint with S. B. Kim (PI) and J. M. Rosenberger,
Dallas-Fort Worth International Airport, \$140,000 (33% V. Chen), 2005–07.
- “A Design of Experiments Study on the Configuration of a High-Speed Rail Station.”
Joint with J. M. Rosenberger (PI),
Dallas-Fort Worth International Airport, \$39,899 (50% V. Chen). 2005–06.
- “Robust Design Optimization for Product Platform Design.”
Joint with K.-L. Tsui (PI), F. Mistree, and J. K. Allen,
National Science Foundation DMI-0100123, \$436,300 (25% V. Chen), 2001–05.
- “Statistical Learning for Optimal Approximate Control Theory.”
National Science Foundation IP-0098009, \$5,000, 2001–02.
- “Computational Requirements of Statistical Learning: Ideal Decision-Making for More Sustainable Urban Environments.” Joint with M. E. Chang, E. K. Lee, and E. L. Johnson,
NSF/EPA Partnership for Environmental Technology (TSE #R-82820701-0),
\$335,000 (77% V. Chen), 2000–05.
- “Fifth North American Meeting of New Researchers in Statistics and Probability.”
Institute of Mathematical Statistics, \$15,900, 2001–02.
National Science Foundation, \$15,000, 2001–02.
Office of Naval Research, \$8,150, 2001–02.
National Security Agency, \$10,000, 2000–01.

Grants and Contracts, as PI or Co-PI (continued)

- “Meeting of New Researchers in Statistics and Probability.”
National Cancer Institute / National Institutes of Health, \$29,650, 2001–02.
- “Exploring Robust Airline Planning Options.”
Joint with E. L. Johnson (PI), Delta Technologies, \$50,000 (50% V. Chen), 2000–01.
- “Robust Airline Planning.”
Joint with E. L. Johnson (PI), Sabre, \$100,000 (50% V. Chen), 1999–2001.
- “Decision-Making for Sustainable Technology.”
Institute for Sustainable Technology and Development,
Georgia Institute of Technology, \$10,000, 1999.
- “Airline Optimization.”
Joint with E. L. Johnson (PI), Sabre, \$50,000 (50% V. Chen), 1998–99.
- “A Stochastic Dynamic Programming Approach to Controlling Ozone in Urban Atlanta.”
General Motors, \$6,000, 1996–97.

Publications – Refereed Book Chapter

Note: Student authors (at the time of first submission) are underlined.

1. Kim, S. B., C. Temiyasathit, S.-K. Park, and V. C. P. Chen (2009). “Spatio-Temporal Data Mining for Air Pollution Problems.” In *Encyclopedia of Data Warehousing and Mining, second edition* (J. Wang, ed.), Hershey, PA: Idea Group Reference, pp. 1815–1822.
2. Tsui, K.-L., V. C. P. Chen, W. Jiang, and Y. A. Aslandogan (2006). “Data Mining Methods and Applications.” In *Springer Handbook of Engineering Statistics* (H. Pham, ed.), London: Springer-Verlag, pp. 651–669.
3. Chen, V. C. P., K.-L. Tsui, R. R. Barton, and J. K. Allen (2003). “A Review of Design and Modeling in Computer Experiments.” In *Handbook of Statistics: Statistics in Industry* (R. Khattree and C. R. Rao, eds.), **22**, Amsterdam: Elsevier Science, pp. 231–261.
COSMOS Technical Report 03-01.

Publications – Refereed Journal

Note: Student authors (at the time of first submission) are underlined.

4. Fan, H.-Y., P. K. Tarun, D. T. Shih, S. B. Kim, V. C. P. Chen, J. M. Rosenberger, and D. Bergman (2011). “Statistical Modeling and Analysis on the Environmental Impact of Airport Deicing Activities.” *Expert Systems with Applications*, to appear.
5. Murphy, T. E., Y. Lin, K.-L. Tsui, V. C. P. Chen, and J. K. Allen (2011). “Identifying Feasible Design Concepts for Products with Competing Performance Requirements by Meta-Modeling of Loss-Scaled Principal Components.” *Quality Engineering*, to appear.
6. Phaladiganon, P., S. B. Kim, V. C. P. Chen, J.-G. Baek, and T. Sukchotrat (2011). “Bootstrap-Based T^2 Multivariate Control Charts.” *Communications in Statistics - Simulation and Computation*, to appear.
7. Phananiramai, P., J. M. Rosenberger, V. C. P. Chen, S. B. Kim, and M. L. Sattler (2011). “A Mathematical Optimization Technique for Managing Selective Catalytic Reduction for Coal-fired Power Plants.” *Energy Systems Journal*, to appear.
8. Sukchotrat, T., S. B. Kim, K.-L. Tsui, and V. C. P. Chen (2011). “Classification-Based Control Charts for Monitoring Multivariate Processes.” *Journal of Statistical Computation and Simulation*, to appear.

Publications – Refereed Journal (continued)

9. Sule, N., V. C. P. Chen, and M. L. Sattler (2011). “A Decision-Making Framework for Assessing Control Strategies for Ground Level Ozone.” *Atmospheric Environment*, to appear.
10. Tarun, P. K., V. C. P. Chen, H. W. Corley, and F. Jiang (2009). “Optimizing Selection of Technologies in a Multiple Stage, Multiple Objective Wastewater Treatment System.” *Journal of Multi-Criteria Decision Analysis*, to appear.
11. Xiao, W., Y. Cheng, W.-J. Lee, V. C. P. Chen, and S. Charoensri (2011). “Hydrogen Filling Station Design for Fuel Cell Vehicles.” *IEEE Transactions on Industry Applications*, **47(1)**, pp. 245–251.
12. Bush, H. M., P. Chongfuangprinya, V. C. P. Chen, T. Sukchotrat, and S. B. Kim (2010). “Nonparametric Multivariate Control Charts Based on a Linkage Ranking Algorithm.” *Quality and Reliability Engineering International*, **26(7)**, pp. 663–675.
13. Sundaramoorthi, D., J. M. Rosenberger, V. C. P. Chen, D. F. Buckley-Behan, and S. B. Kim (2010). “Evidence-Based Nursing Simulation and Patient Assignment: Unearthing Patterns.” *Nursing Management*, **41(11)**, pp. 14–16.
14. Sundaramoorthi, D., V. C. P. Chen, J. M. Rosenberger, S. B. Kim, and D. F. Buckley-Behan (2010). “A Data-Integrated Simulation-Based Optimization of New Patient Assignments.” *Health Care Management Science*, **13(3)**, pp. 210–221.
15. Kim, S. B., K.-L. Tsui, T. Sukchotrat, V. C. P. Chen (2009). “A Comparison Study and Discussion of the Mahalanobis-Taguchi System.” *International Journal of Industrial and Systems Engineering*, **4(6)**, pp. 631–644.
16. Sundaramoorthi, D., V. C. P. Chen, J. M. Rosenberger, S. B. Kim, and D. F. Buckley-Behan (2009). “A Data-Integrated Simulation Model to Evaluate Nurse-Patient Assignments.” *Health Care Management Science*, **12(3)**, pp. 252–268.
17. Yang, Z., V. C. P. Chen, M. E. Chang, M. L. Sattler, and A. Wen (2009). “A Decision-Making Framework for Ozone Pollution Control.” *Operations Research*, **57(2)**, pp. 484–498.
18. Kim, S. B., V. C. P. Chen, Y. Park, T. R. Ziegler, and D. P. Jones (2008). “Controlling the False Discovery Rate for Features Selection in High-Resolution NMR Spectra.” *Statistical Analysis and Data Mining*, **1(2)**, pp. 57–66.
19. Kim, S. B., C. Temiyasathit, S.-K. Park, V. C. P. Chen, M. L. Sattler, and A. G. Russell (2008). “Characterization of Spatially Homogeneous Regions Based on Temporal Patterns of Particulate Matter 2.5 in the Continental United States.” *Journal of the Air & Waste Management Association*, **58(7)**, pp. 965–975.
20. Pilla, V. L., J. M. Rosenberger, V. C. P. Chen, and B. C. Smith (2008). “A Statistical Computer Experiments Approach to Airline Fleet Assignment.” *IIE Transactions*, **40(5)**, pp. 524–537. Paper highlighted in May 2008 issue of *IE Magazine*.
21. Siddappa, S., J. M. Rosenberger, and V. C. P. Chen (2008). “Optimising Airline Overbooking Using a Hybrid Gradient Approach and Statistical Modeling.” *Journal of Pricing and Revenue Management*, **7(2)**, pp. 207–218.
22. Cervellera, C., A. Wen, and V. C. P. Chen (2007). “Neural Network and Regression Spline Value Function Approximations for Stochastic Dynamic Programming.” *Computers and Operations Research*, **34**, pp. 70–90.

Publications – Refereed Journal (continued)

23. Siddappa, S., D. Günther, J. M. Rosenberger, and V. C. P. Chen (2007). “Refined Experimental Design and Regression Splines Method for Network Revenue Management.” *Journal of Pricing and Revenue Management*, INFORMS Special Issue, **6(3)**, pp. 188–199.
24. Yang, Z., V. C. P. Chen, M. E. Chang, T. E. Murphy, and J. C. C. Tsai (2007). “Mining and Modeling for a Metropolitan Atlanta Ozone Pollution Decision-Making Framework.” *IIE Transactions*, Special Issue on Data Mining, **39**, pp. 607–615. Paper highlighted in June 2007 issue of *IE Magazine*.
25. Cervellera, C., V. C. P. Chen, and A. Wen (2006). “Optimization of a Large-Scale Water Reservoir Network by Stochastic Dynamic Programming with Efficient State Space Discretization.” *European Journal of Operational Research*, **171**, pp. 1139–1151.
26. Chen, V. C. P., K.-L. Tsui, R. R. Barton, and M. Meckesheimer (2006). “Design, Modeling, and Applications of Computer Experiments.” *IIE Transactions*, **38**, pp. 273–291.
27. Tsai, J. C. C. and V. C. P. Chen (2005). “Flexible and Robust Implementations of Multivariate Adaptive Regression Splines within a Wastewater Treatment Stochastic Dynamic Program.” *Quality and Reliability Engineering International*, **21**, pp. 689–699.
28. Tsai, J. C. C., V. C. P. Chen, M. B. Beck, and J. Chen (2004). “Stochastic Dynamic Programming Formulation for a Wastewater Treatment Decision-Making Framework.” *Annals of Operations Research*, Special Issue on Applied Optimization Under Uncertainty, **132**, pp. 207–221.
29. Chen, V. C. P., D. Günther, and E. L. Johnson (2003). “Solving for an Optimal Airline Yield Management Policy via Statistical Learning.” *Journal of the Royal Statistical Society, Series C*, **52 Part 1**, pp. 1–12.
30. Barnes, E. R., V. C. P. Chen, B. Gopalakrishnan, and E. L. Johnson (2002). “A Least Squares Primal-Dual Algorithm for Solving Linear Programming Problems.” *Operations Research Letters*, **30(5)**, pp. 289–294.
31. Beamon, B. M. and V. C. P. Chen (2001). “Performance Analysis of Conjoined Supply Chains.” *International Journal of Production Research*, **39**, pp. 3195–3218.
32. Chen, V. C. P. (2001). “Measuring the Goodness of Orthogonal Array Discretizations for Stochastic Programming and Stochastic Dynamic Programming.” *SIAM Journal on Optimization*, **12**, pp. 322–344.
33. Chen, V. C. P. and D. K. Rollins (2000). “Issues Regarding Artificial Neural Network Modeling for Reactors and Fermenters.” *Bioprocess Engineering*, **22**, pp. 85–93.
34. Chen, V. C. P. (1999). “Application of Orthogonal Arrays and MARS to Inventory Forecasting Stochastic Dynamic Programs.” *Computational Statistics and Data Analysis*, **30**, pp. 317–341.
35. Chen, V. C. P., D. Ruppert, and C. A. Shoemaker (1999). “Applying Experimental Design and Regression Splines to High-Dimensional Continuous-State Stochastic Dynamic Programming.” *Operations Research*, **47(1)**, pp. 38–53.
36. Chen, V. C. P., M. Melendez, and D. K. Rollins (1998). “The Problem of Too Much Power in Detecting Biases for a Real Chemical Process.” *ISA Transactions*, **37**, pp. 329–336.
37. Beamon, B. M. and V. C. P. Chen (1998). “Performability-Based Fleet Sizing in a Material Handling System.” *International Journal of Advanced Manufacturing Technology*, **14**, pp. 441–449.

Publications – Refereed Journal (continued)

38. Chen, V. C. P. and A. J. Hayter (1996). “Sensitivity Analysis of Upper Confidence Bounds on the Range of Treatment Effects.” *Computational Statistics and Data Analysis*, **23**, pp. 257–262.
39. Rollins, D. K., Y. Cheng, and V. C. P. Chen (1996). “Detection of Equipment Faults in Automatically Controlled Processes.” *AIChE Journal*, **42**, pp. 1642–1647.

Publications – Refereed Conference

Note: Student authors (at the time of first submission) are underlined.

40. Martinez, N. M., D. L. Martinez, J. M. Rosenberger, and V. C. P. Chen (2011). “Global Optimization for a Piecewise Linear Regression Spline Function.” In *Proceedings of the 2011 IE Research Conference*, Reno, NV, May.
41. Ariyajunya, B., V. C. P. Chen, and S. B. Kim (2010). “Orthogonalized Dynamic Programming State Space for Efficient Value Function Approximation.” In *Proceedings of the 2010 IE Research Conference*, Cancun, Mexico, June.
42. Lin, C.-F., V. C. P. Chen, and R. J. Gatchel (2010). “An Adaptive Pain Management Framework.” In *Proceedings of the 2010 IE Research Conference*, Cancun, Mexico, June.
43. Xiao, W., Y. Cheng, W.-J. Lee, V. C. P. Chen, and S. Charoensri (2010). “Hydrogen Filling Station Design for Fuel Cell Vehicles” In *Proceedings of the IEEE, Industry Applications Society, Industrial and Commercial Power Systems Annual Conference*, May.
44. Afotey, B., M. L. Sattler, S. P. Mattingly, and V. C. P. Chen (2009). “Statistical Approach to the Development of a Microscale Model for Estimating Carbon Dioxide Emissions from a Light Duty Gasoline Vehicle.” In *Proceedings of the 102nd Air & Waste Management Association Annual Conference*, Detroit, MI, June, Paper #427.
45. Sahu, S., V. C. P. Chen, and C.-F. Lin (2009). “TreeMARS Models for a Decision Support System for Pain Management.” In *Proceedings of the 2009 IE Research Conference*, Miami, FL, May.
46. Sule, N. V., M. L. Sattler, and V. C. P. Chen (2008). “Assessing Control Strategies for Ground Level Ozone.” In *Proceedings of the 101st Air & Waste Management Association Annual Conference*, Portland, OR, June, Paper #492.
47. Sukchotrat, T., S. B. Kim, V. C. P. Chen, C. Carter, W. Dockery, and R. Tapia (2008). “An Application of Supervised Multivariate Control Charts on a Power Plant Data.” In *Proceedings of the 2008 IE Research Conference*, Vancouver, BC, Canada, May.
48. Tarun, P. K., V. C. P. Chen, H. W. Corley, and F. Jiang (2008). “Incorporating Decision Makers’ Inputs in a Dynamic Multiple Stage, Multiple Objective Model.” In *Proceedings of the 2008 IE Research Conference*, Vancouver, BC, Canada, May.
49. Hwang, H.-S., J. M. Rosenberger, V. C. P. Chen, S. Yanes, S. Green, and C. Whitman (2007). “A Study of Congestion on the Configuration of a High-Speed Rail Station at Dallas-Fort Worth International Airport.” In *Proceedings of the 2007 World Conference on Transport Research*, Berkeley, CA, June.
50. Kim, S. B., J. M. Rosenberger, V. C. P. Chen, H.-Y. Fan, D. T. Shih, and D. Bergman (2007). “Statistically Mining the Environmental Impact of Airport Deicing Activities.” In *Proceedings of the 2007 IE Research Conference*, Nashville, TN, May.
51. Tarun, P. K., V. C. P. Chen, and H. W. Corley (2007). “A Dynamic Multiple Stage, Multiple Objective Optimization Model.” In *Proceedings of the 2007 IE Research Conference*, Nashville, TN, May.

Publications – Refereed Conference (continued)

52. Sundaramoorthi, D., V. C. P. Chen, S. B. Kim, J. M. Rosenberger, and D. F. Buckley-Behan (2006). “A Data-Integrated Nurse Activity Simulation Model.” In *Proceedings of the 2006 Winter Simulation Conference*, Monterey, CA, December.
53. Shih, D. T., V. C. P. Chen, and S. B. Kim (2006). “Convex Version of Multivariate Adaptive Regression Splines for Optimization.” In *Proceedings of the 2006 IE Research Conference*, Orlando, FL, May.
54. Siddappa, S., V. C. P. Chen, J. M. Rosenberger, and D. Günther (2006). “Markov Decision Process Based Statistical Modeling Approach to Revenue Management.” In *Proceedings of the 2006 IE Research Conference*, Orlando, FL, May.
55. Sundaramoorthi, D., V. C. P. Chen, J. M. Rosenberger, S. B. Kim, and D. F. Buckley-Behan (2006). “Using Classification and Regression Trees for a Nurse Activity Simulation.” In *Proceedings of the 2006 IE Research Conference*, Orlando, FL, May.
56. Sundaramoorthi, D., V. C. P. Chen, J. M. Rosenberger, and D. F. Buckley Green (2005). “Knowledge Discovery and Mining for Nurse Activity and Patient Data.” In *Proceedings of the 2005 IE Research Conference*, Atlanta, GA, May.
57. Wen, A., V. C. P. Chen, and C. Cervellera (2005). “Comparison of Experimental Designs in Continuous-State Stochastic Dynamic Programming.” In *Proceedings of the 2005 IE Research Conference*, Atlanta, GA, May.
58. Cervellera, C., V. C. P. Chen, and A. Wen (2004). “Optimization of a Large-Scale Water Reservoir Network.” In *Proceedings of the 2004 IE Research Conference*, Houston, TX, May.
59. Lin, Y., F. Mistree, J. K. Allen, K.-L. Tsui, and V. C. P. Chen (2004). “A Sequential Exploratory Experimental Design Method: Development of Appropriate Empirical Models in Design.” In *Proceedings of the 2004 ASME International Design Engineering Technical Conferences & 24th Computers and Information in Engineering Conference*, Salt Lake City, UT, September, DETC2004-57527.
60. Pilla, V. L., V. C. P. Chen, J. M. Rosenberger, and B. S. Boardman (2004). “Dimensionality Reduction in Airline Fleet Assignment Modeling.” In *Proceedings of the 2004 IE Research Conference*, Houston, TX, May.
61. Yang, Z., V. C. P. Chen, M. E. Chang, and T. E. Murphy (2004). “Formulation of a Decision-Making Framework for Studying Ozone Pollution in Urban Atlanta.” In *Proceedings of the 2004 IE Research Conference*, Houston, TX, May.
62. Bush, H. M., B. S. Boardman, and V. C. P. Chen (2003). “Ranking Algorithms for Nonparametric Multivariate Quality Control.” In *Proceedings of the 2003 IE Research Conference*, Portland, OR, May.
63. Tsai, J. C. C., V. C. P. Chen, and B. S. Boardman (2003). “Flexible Implementation of Multivariate Adaptive Regression Splines in Solving Continuous-State Stochastic Dynamic Programming.” In *Proceedings of the 2003 IE Research Conference*, Portland, OR, May.
64. Kuiper, S. D., D. K. Rollins, and V. C. P. Chen (1997). “Evaluation of Two Techniques for Gross Error Detection and Estimation When Constraints are Bilinear.” In *ADCHEM 1997 International Symposium on Advanced Control of Chemical Processes*, November, pp. 289–294.

Publications – Refereed Conference (continued)

65. Chen, V. C. P., J. Heldt, K. McGlynn, and D. K. Rollins (1996). “Critical Issues in Data Collection and Conditions When Fitting Predictive Neural Network Models for Dynamic Processes.” In *ISA/96 Proceedings: Advances in Instrumentation and Control*, **51**, November, pp. 279–291.
66. Chen, V. C. P. and D. K. Rollins (1996). “Gross Error Detection and Power Analysis for a Real Chemical Process.” In *ISA/96 Proceedings: Advances in Instrumentation and Control*, **51**, November, pp. 187–199.
67. Garth, A. D. N., D. K. Rollins, V. C. P. Chen, and J. Zhu (1996). “Evaluation of Model Discrimination Techniques in Artificial Neural Networks with Application to Grain Drying.” In *ANNIE 96 Proceedings: Intelligent Engineering Systems Through Artificial Neural Networks*, **6**, November, pp. 939–950.
68. Liang, J. M., D. K. Rollins, and V. C. P. Chen (1996). “A Comparative Study Between Linear Regression and Artificial Neural Networks in Modeling an Industrial Grain Dryer.” In *ISA/96 Proceedings: Advances in Instrumentation and Control*, **51**, November, pp. 235–243.

Manuscripts under Review or Revision

69. Kim, S. B., W. Jitpitaklert, V. C. P. Chen, and P. Phaladiganon (2010). “Data Mining Model Adjustment Control Charts for Cascade Processes.” COSMOS Technical Report 10-07.
70. Pilla, V. L., W., J. M. Rosenberger, V. C. P. Chen, *N. Engsuwan*, and S. Siddappa (2010). “A Multivariate Adaptive Regression Splines Cutting Plane Approach for Solving a Two-Stage Stochastic Programming Fleet Assignment Model.” COSMOS Technical Report 10-06.
71. Shih, D. T., S. B. Kim, V. C. P. Chen, J. M. Rosenberger, and V. L. Pilla (2007). “Efficient Computer Experiment-Based Optimization through Variable Selection.” COSMOS Technical Report 07-02.

Manuscripts in Preparation and Working Papers

72. Fan, H.-Y. and V. C. P. Chen. “A Sequential Approach for Statistics-Based Value Function Representation in Approximate Dynamic Programming.”
73. Fan, H.-Y. and V. C. P. Chen. “Sequential State Space Exploration in Adaptive Approximate Dynamic Programming.”
74. Hsu, W.-C., N. V. Sule, J. M. Rosenberger, V. C. P. Chen, and M. L. Sattler. “Mixed Integer Programming Models for Selecting Ground-Level Ozone Control Strategies.”
75. Shih, D. T., *D. L. Martinez*, V. C. P. Chen, and S. B. Kim. “Convex Multivariate Adaptive Regression Splines for Optimization.”

Publications – Non-Refereed

76. Chen, V. C. P., S. B. Kim, and J. M. Rosenberger (2009). “Discussion Note for ‘Topics on Optimization and Data Mining in Medicine’.” *TOP- An Official Journal of the Spanish Society of Statistics and Operations Research*, **17(2)**, pp. 240–246 (invited).

Publications – Non-Refereed (continued)

77. Sundaramoorthi, D., V. C. P. Chen, J. M. Rosenberger, and S. B. Kim (2008). “A Data-Integrated Simulation Based Optimal Policy to Assign Nurses to Patients.” In *Proceedings of the Third INFORMS Workshop on Data Mining and Health Informatics*, Washington, DC, October. (abstract refereed)
78. Rattakorn, P., C. E. Hagains, T. Ativanichayaphong, V. C. P. Chen, Y. B. Peng, S. B. Kim, J. M. Rosenberger, and J.-C. Chiao (2007). “Data Mining in a Wireless Neurostimulation System for Pain Reduction.” In *Proceedings of the Second INFORMS Artificial Intelligence and Data Mining Workshop*, Seattle, WA, November. (abstract refereed)
79. Shih, D. T., V. L. Pilla, S. B. Kim, J. M. Rosenberger, and V. C. P. Chen (2006). “Efficient Computer Experiment Based Optimization through Variable Selection.” In *Proceedings of the INFORMS Artificial Intelligence and Data Mining Workshop*, Pittsburgh, PA, November. (abstract refereed)
80. Lin, Y., F. Mistree, J. K. Allen, K.-L. Tsui, and V. C. P. Chen (2004). “Sequential Metamodeling in Engineering Design.” In *Proceedings of the 10th AIAA/ISSMO Multidisciplinary Analysis and Optimization Conference*, Albany, NY, August, Paper # AIAA-2004-4304 (abstract refereed).
81. Chen, V. C. P., Z. Yang, M. Chang, and T. Murphy (2003). “A Decision-Making Framework for Studying Ozone Pollution in Urban Atlanta.” In *Proceedings of the 7th Annual Green Chemistry and Engineering Conference*, Washington, D. C., June.
82. Chen, V. C. P., D. Günther, and E. L. Johnson (2003). “Routing Considerations in Airline Yield Management.” In *Operations Research in Space and Air*, pp. 333–350, T. A. Ciriani, G. Fasano, S. Gliozzi, and R. Tadei (eds.), Kluwer, The Netherlands.
83. Chen, V. C. P. and W. J. Welch (2001). “Statistical Methods for Deterministic Biomathematical Models.” In *Proceedings of the 53rd Session of the International Statistical Institute*, Seoul, Korea, August.
84. Chen, V. C. P., J. C. C. Tsai, E. K. Lee, E. L. Johnson (2001). “A Decision-Making Framework for Evaluating Wastewater Treatment Technologies.” In *Proceedings of the 5th Annual Green Chemistry and Engineering Conference*, Washington, D. C. June.
85. Chen, V. C. P., J. Chen, and M. B. Beck (2000). “Statistical Learning within a Decision-Making Framework for More Sustainable Urban Environments.” In *2000 Proceedings of the Section Quality and Productivity*, American Statistical Association, June, pp. 114–117.
86. Chen, V. C. P. (2000). Book Review of *Into Statistics* by P. J. Smith. *The American Statistician*, 54(1), pp. 81–82.
87. Chen, V. C. P., D. Günther, and E. L. Johnson (1999). “A Comparison of Two New Approaches to Airline Yield Management.” In *Proceedings of the 5th International Conference of the Decision Sciences Institute*, Athens, Greece, July.
88. Jones-Crabtree, A. J., A. R. Pearce, and V. C. P. Chen (1998). “Implementing Sustainability Knowledge into the Built Environment: An Assessment of Current Approaches.” In *Proceedings of the 1998 IE Research Conference*, Banff, Canada, May, CD Rom. (Invited)
89. Biechler, A. J., V. C. P. Chen, K. McGlynn, and D. K. Rollins (1996). “Important Considerations in Dynamic Predictive Modeling Using Artificial Neural Networks and Other Empirical Modeling Methods.” In *Proceedings of the 23rd Annual National NOBCCHE Conference*, Detroit, MI, April.

Publications – Non-Refereed (continued)

90. Chen, V. C. P. (1995). “Discretizing the State Space for High-Dimensional Continuous-State Stochastic Dynamic Programs.” *ISyE Technical Report*, Georgia Institute of Technology, Atlanta, GA.
91. Chen, V. C. P. and A. J. Hayter (1994). “Upper Confidence Bounds on the Range of Treatment Effects.” In *Proceedings of the International Conference on Statistics in Industry, Science, and Technology*, Tokyo, Japan, July, pp. 340–345.

Conference Presentations, as Lead or Co-Author

INFORMS Annual Meeting, Austin, TX, November 2010 (Sponsored talks):

An Adaptive Pain Management Framework, with C.-F. Lin and R. Gatchel.

Bootstrap-based T^2 Multivariate Control Charts, with P. Phaladiganon and S. B. Kim.

Convex Versions of Multivariate Adaptive Regression Splines, with D. L. Martinez and D. T. Shih.

Orthogonalized Dynamic Programming State Space for Efficient Value Function Approximation, with B. Ariyajunya and S. B. Kim.

Sequential Adaptive Modeling for Approximate Dynamic Programming, with H.-Y. Fan.

Mathematical Optimization Technique for Managing Selective Catalytic Reduction, with P. Phananiramai, J. Rosenberger, and M. Sattler.

Mixed Integer Programming Models for Selecting Ground-Level Ozone Control Strategies, with W.-C. Hsu, J. Rosenberger, M. Sattler, N. Sule.

A Multi-stage Decision-Making Framework for Evaluating Building Technologies, with P. Kung.

INFORMS Annual Meeting, San Diego, CA, October 2009 (Sponsored talks):

Development of a Dynamic Treatment Regime for Pain Management, with C.-F. Lin and R. Gatchel.

Efficient Computer Experiment Based Optimization through Variable Selection, with D. T. Shih, S. B. Kim, V. Pilla, and J. Rosenberger.

A Linkage Ranking Algorithm for Multivariate Quality Control, with P. Chongfuangprinya, H. Bush, and S. B. Kim.

Managing Selective Catalytic Reduction for Coal-fired Power Plants, with P. Phananiramai, C. Carter, D. Harris, S. B. Kim, J. Rosenberger, S. Sadeghipour, and M. Sattler.

Simulation and Optimization of Nurse-to-Patient Assignments, with D. Sundaramoorthi, D. Behan, S. B. Kim, P. Punnakitikashem, J. Rosenberger, and L. Wheeler.

Tree-MARS Future Value Function Approximation in Stochastic Dynamic Programming, with S. Sahu, S. B. Kim, and P. Tarun.

Using Data Mining Tools to Generate an Efficient and Orthogonal Dynamic Programming State Space, with B. Ariyajunya and S. B. Kim.

INFORMS Annual Meeting, Washington, DC, October 2008 (Sponsored talks):

INFORMS - Opportunities to Shape the Future (Panel Discussion).

Application of Three-phase Methodology on the Multistage Multiobjective Wastewater Treatment System, with P. Tarun and H. W. Corley.

A Data-integrated Simulation Approach to Optimize Patient Care, with D. Sundaramoorthi, S. B. Kim, and J. Rosenberger.

Sequential Value Function Approximations for Real-World Dynamic Programming, with H.-Y. Fan.

Tree-MARS Models, with S. Sahu and C.-F. Lin.

Conference Presentations, as Lead or Co-Author (continued)

INFORMS Annual Meeting, Seattle, WA, November 2007 (Sponsored talks):

Data-driven Optimization for Minimizing the Environmental Impact of Airport Deicing Activities, with D. Bergman, H.-Y. Fan, S. B. Kim, J. Rosenberger, and P. Tarun.

A Data-integrated Nurse-patient Assignment Simulation: Development and Validation, with D. Sundaramoorthi, S. B. Kim, and J. Rosenberger.

Incorporating Decision Makers' Inputs in a Dynamic Multistage Multiobjective Model, with P. Tarun and H. W. Corley.

Uninhabited Aerial Vehicle Routing with Limited Wind Risk, with S. Visoldilokpun and J. Rosenberger.

INFORMS Annual Meeting, Pittsburgh, PA, November 2006 (Sponsored talks):

A Computer Experiments Approach for Solving a Two-Stage Airline Fleet Assignment Model, with V. Pilla and J. Rosenberger.

Convex version of Multivariate Adaptive Regression Splines for Optimization, with D. T. Shih and S. B. Kim.

A Data-Integrated Simulation Model for Nurse Activity, with D. Sundaramoorthi, S. B. Kim, and J. Rosenberger.

A Sequential Response Surface Methodology for the Aircraft Rotation Problem, with S. Visoldilokpun, H. W. Corley, S. B. Kim, and J. Rosenberger.

Statistical Modeling Approach to Airline Revenue Management, with S. Siddappa, D. Günther, and J. Rosenberger.

Society for Prevention Research Annual Meeting, San Antonio, TX, June 2006 (Invited),

An Adaptive Dynamic Programming Decision Making Framework.

INFORMS Annual Meeting, San Francisco, CA, November 2005 (Sponsored talks):

A Decision-Making Framework for Ozone Pollution, with Z. Yang.

Mining to Model State Transitions for Ozone Pollution Control Strategies, with M. Chang and Z. Yang.

Solving a Two-Stage Stochastic Programming Fleet Assignment Model, with V. Pilla and J. Rosenberger.

A Stochastic Gradient Approach to Optimal Control using Neural Networks and Experimental Design, with A. Wen and C. Cervellera.

Using Classification Trees to Develop a Nurse Activity Simulation, with D. Sundaramoorthi and J. Rosenberger.

2nd International Conference on Green and Sustainable Chemistry and

9th Annual Green Chemistry & Engineering Conference, Washington, D. C., June 2005,

A Decision-Making Framework for Studying Ozone Pollution in Urban Atlanta.

INFORMS Annual Meeting, Denver, CO, October 2004 (Sponsored talks):

Application of Data Mining to Nurse Activity and Patient Diagnosis, with D. Sundaramoorthi and J. Rosenberger.

Comparison of MARS & Neural Networks in Optimizing a Water Reservoir Network, with A. Wen and C. Cervellera.

Mining Atlanta Ozone Pollution Data, with J. Tsai.

Ozone Pollution Decision-Making Framework, with Z. Yang and M. Chang.

Solving a Class of Conditional Location-Allocation Problems Utilizing Artificial Neural Networks, with A. Wen.

Solving a Stochastic Programming Fleet Assignment Model, with J. Rosenberger and V. Pilla.

Conference Presentations, as Lead or Co-Author (continued)

INFORMS Annual Meeting, Atlanta, GA, October 2003 (Sponsored talks):

Construction of Transition Functions for an Ozone Pollution Stochastic Dynamic Program, with T. Murphy, J. Tsai, and Z. Yang.

A Decision-Making Framework for Studying Ozone Pollution in Urban Atlanta, with Z. Yang and M. Chang.

Optimization of a Large-scale Water Reservoir Network by Stochastic Dynamic Programming with Efficient State Space Discretization, with C. Cervellera and A. Wen.

A Service Based Architecture for Information and Asset Use in Distribute Product Realization, with J. Panchal, J. Allen, H. Choi, and F. Mistree.

Variants of Multivariate Adaptive Regression Splines in Solving Continuous-State Stochastic Dynamic Programming, with J. Tsai.

Euro-INFORMS Meeting, Istanbul, Turkey, July 2003 (Invited talks):

Optimization of a Large-scale Water Reservoir Network by Stochastic Dynamic Programming with Efficient State Space Discretization, with C. Cervellera and A. Wen.

Neural Network and Regression Spline Approximations for the Optimal Control of an Inventory Forecasting Model, with C. Cervellera and A. Wen.

INFORMS Annual Meeting, San Jose, CA, November 2002 (Invited),

Flexible Implementation of Multivariate Adaptive Regression Splines in Solving Continuous-State Stochastic Dynamic Programming, with J. Tsai.

INFORMS Annual Meeting, Miami, FL, November 2001 (Invited),

Application of Parallel-MARS to a Decision-Making Framework for Wastewater Treatment, with J. Tsai.

21st International Symposium on Forecasting, Pine Mountain, GA, June 2001 (Invited),

Panelist, *New and Needed: Forecasting Tools, Techniques, and Marketable Skills*.

INFORMS Fall Meeting, San Antonio, TX, November 2000 (Sponsored talks):

Kriging Estimation Within a Decision-Making Framework for Evaluating Process Technologies in a Wastewater Treatment System, with W. Welch and T. Simpson.

Neural Network and Regression Spline Value Function Approximations for Inventory Forecasting Stochastic Dynamic Programs, with C. Cervellera.

INFORMS Spring Meeting, Salt Lake City, UT, May 2000 (Invited),

Evaluating Emerging Technologies for a Sustainable City, with M. Chang and E. Johnson.

INFORMS Fall Meeting, Philadelphia, PA, November 1999 (Sponsored talks):

An Approach to Airline Yield Management Based on a Markov Decision Process, with D. Günther and E. Johnson.

Application of the OA/MARS Stochastic Dynamic Programming Method to Inventory Forecasting Problems.

Euro-INFORMS Conference, Barcelona, Spain, July 1997,

Use of Experimental Design and Regression Splines to Reduce Computation for Stochastic Dynamic Programming, with C. Shoemaker.

AIChE Annual Meeting, Chicago, IL, November 1996,

Evaluation of Model Discrimination Techniques in Artificial Neural Networks with Application to Grain Drying, with D. Rollins.

ISA/96 Exposition, Chicago, IL, October 1996,

Critical Issues in Data Collection and Conditions When Fitting Predictive Neural Network Models for Dynamic Processes, with D. Rollins.

Conference Presentations, as Lead or Co-Author (continued)

- Eastern Regional IMS/ENAR Meeting, Birmingham, AL, March 1995 (Invited),
An Application of MARS and Orthogonal Arrays to High-Dimensional Continuous-State Stochastic Dynamic Programming.
- Spring Research Conference on Statistics in Industry and Technology, Chapel Hill, NC, June 1994,
Assessing the Equivalence of Several Treatment Means, with A. Hayter.
- TIMS/ORSA Joint National Meeting, Boston, MA, April 1994 (Invited),
Applying Experimental Design and Regression Splines to High-Dimensional Continuous-State Stochastic Dynamic Programming.

Technical Seminars

- Department of Information Technology and Decision Sciences, University of North Texas, October 2010,
Assessing Control Strategies for Ozone Pollution.
- Department of Statistics and Operations Technology, University of Denver, May 2007,
Experimental Design and Regression Spline Method for Airline Network Revenue Management.
- IGERT (NSF Integrative Graduate Education and Research Traineeship) Joint Program in Applied Mathematics and the Earth & Environmental Sciences Departments, Columbia University, New York City, NY, March 2004,
A Decision-Making Framework for More Sustainable Urban Environments.
- Photochemical Modeling Summit, Texas Commission on Environmental Quality, Austin, TX, January 2004,
Decision-Making Framework for Studying Ground-Level Ozone in Atlanta.
- Department of Mathematical Sciences, University of Texas at Dallas, October 2002,
Statistical Modeling within a Modular Decision-Making Framework.
- Department of Communications, Computer and System Sciences – DIST, University of Genoa, Italy, June 2001,
Statistics and Applications in Stochastic Dynamic Programming.
- SABRE, Southlake, TX, December 1999 (Joint talk with E. L. Johnson),
Stochastic Programming, Benders Decomposition, and Value Function Approximation.
- SABRE, Southlake, TX, August 1998,
Application of Experimental Design and Regression Splines to High-Dimensional Continuous-State Stochastic Dynamic Programming.
- Department of Statistics, University of Georgia, Athens, GA, March 1998,
An Application of MARS and Orthogonal Arrays to High-Dimensional Continuous-State Stochastic Dynamic Programming.
- Department of Statistics, Iowa State University, Ames, IA, January 1996,
An Application of MARS and Orthogonal Arrays to High-Dimensional Continuous-State Stochastic Dynamic Programming.
- AT&T Manufacturing Systems and Operations Research Seminar, Georgia Institute of Technology, Atlanta, GA, February 1993,
Applying Experimental Design and Regression Splines to High-Dimensional Continuous-State Stochastic Dynamic Programming.

Technical Seminars (continued)

- Operations Research Colloquium, Cornell University, Ithaca, NY, February 1993,
*Applying Experimental Design and Regression Splines to High-Dimensional
Continuous-State Stochastic Dynamic Programming.*
- Cornell University Dedication of the Robert E. Bechhofer Graduate Resource Facility,
Ithaca, NY, May 1992, *Multi-dimensional Continuous-State Stochastic Dynamic
Programming.*
- System Sciences Department Seminar, RAND Corporation, Santa Monica, CA,
August 1990, *Shrinkage Estimators: An Application to Air Force Logistics.*

Technical Posters, as Lead or Co-Author

- Mayo Clinic Conference on Systems Engineering & Operations Research in Health Care,
Rochester, MN, August 2009,
A Data Integrated Simulation Based Optimization of New Patient Assignments,
with D. Sundaramoorthi, J. M. Rosenberger, S. B. Kim, D. F. Buckley-Behan,
and L. C. Wheeler.
- 102nd Air & Waste Management Association Annual Conference, Detroit, MI, June 2009,
Assessing Control Strategies for Ground Level Ozone,
with N. V. Sule and M. L. Sattler.
- Biomedical Engineering Society 2007 Annual Meeting, Los Angeles, CA, September 2007,
Statistical Data Mining of a Wireless Neurostimulation System,
with P. Rattakorn, C. E. Hagains, T. Ativanichayaphong, Y. B. Peng, S. B. Kim,
J. M. Rosenberger, and J.-C. Chiao.
- Operations Research Symposium in Health Care, Vancouver, Canada, August 2007,
Data Mining in a Wireless Neurostimulation System for Pain Reduction,
with P. Rattakorn, C. E. Hagains, T. Ativanichayaphong, Y. B. Peng, S. B. Kim,
J. M. Rosenberger, and J.-C. Chiao.
- 100th Air & Waste Management Association Annual Conference, Pittsburgh, PA, June 2007,
Assessing Control Strategies for Ground Level Ozone,
with N. V. Sule and M. L. Sattler.
- Statistical and Applied Mathematical Sciences Institute (SAMSI),
Summer Research Program on Challenges in Dynamic Treatment Regimes and Multistage
Decision-Making, Research Triangle Park, NC, June 2007,
A Dynamic Decision-Support System.
- Second Meeting of the Adaptive Treatment Strategies Network, Ann Arbor, MI,
September 2005,
A Dynamic Decision-Support System.
- Sigma Theta Tau 17th International Nursing Research Congress Focusing on Evidence-Based
Practice, Montreal, Canada, July 2006,
Optimization and Simulation for Nurse Assignment,
with D. Buckley-Behan, J. M. Rosenberger, S. B. Kim, and P. Punnakitikashem.

Professional Activities and Honors

Awardee	Best Presentation in the Interactive Session, INFORMS Annual Meeting, 2009 (with D. Sundaramoorthi, P. Punnakitikashem, J. M. Rosenberger, S. B. Kim, D. F. Buckley-Behan, and L. C. Wheeler).
Awardee	Best Research Poster, Mayo Clinic Conference on Systems Engineering & Operations Research in Health Care, 2009 (with D. Sundaramoorthi, J. M. Rosenberger, S. B. Kim, D. F. Buckley-Behan, and L. C. Wheeler).
Awardee	College of Engineering Research Stipend, UTA, 2005–09.
Member	Workshop Committee, INFORMS Section on Data Mining, 2008–present.
Guest Editor	<i>Annals of Operations Research</i> , 2006–present.
Organizer/Chair	SPR Annual Meeting Organized Symposium, 2006.
Member	Advisory Board, INFORMS Section on Data Mining, 2006–present.
Program Co-Chair	INFORMS Artificial Intelligence and Data Mining Workshop, 2005–06.
Awardee	<i>Operations Research</i> Meritorious Service Award, INFORMS, 2005.
Cluster Chair	Section on Data Mining and Society on Computing, INFORMS Annual Meeting, 2004–08.
Chair, Vice-Chair	INFORMS Section on Data Mining, 2004–06.
Secretary	INFORMS Section on Data Mining, 2003–04.
Co-founder	INFORMS Section on Data Mining (with K.-L.), 2003–04.
Secretary	INFORMS Forum for Women in OR/MS, 2001–present.
Session Chair	INFORMS Meetings, 2000–09.
Chair	IMS New Researchers Committee, 2001–02.
Member	IMS Committee on Nominations, 2001–02.
Program Chair	Fifth IMS North American New Researchers Conference, 2000–01.
Publicity Chair	21st International Symposium on Forecasting, 2000–01.
Nominee	Outstanding Professor Award, 2000.
Session Chair	Statistical Computing, Joint Statistical Meetings, 1999.
Vice President	Atlanta Chapter of the ASA, 1995–2001.
Senior Member	Institute of Industrial Engineers (IIE), 1996–present.
Member	Institute for Operations Research and Management Sciences (INFORMS), American Statistical Association (ASA), Institute of Mathematical Statistics (IMS), International Biometric Society (ENAR).
Member	Tau Beta Pi Engineering Honor Society, 1988–present.
Review Panelist	National Science Foundation, Dec. 2002, Apr. 2005, Oct. 2005, Feb. 2011.
Journal Referee	<i>Operations Research</i> ; <i>IIE Transactions</i> ; <i>Annals of Operations Research</i> ; <i>Naval Research Logistics</i> ; <i>International Journal of Production Research</i> ; <i>Computational Statistics & Data Analysis</i> ; <i>Journal of Quality Technology</i> ; <i>Quality and Reliability Engineering International</i> ; <i>ISA Transactions</i> ; <i>IEEE Transactions on Systems, Man, & Cybernetics</i> ; <i>Computers & IE</i> ; <i>INFORMS Transactions on Education</i> ; <i>Journal of Process Control</i> ; <i>Journal of the Air & Waste Management Association</i> ; <i>Inverse Problems in Science & Engineering</i> ; <i>Water Resources Research</i> ; <i>Hydrological Sciences Journal</i> ; <i>Environmental Models & Assessment</i> ; <i>Biotechnology Progress</i> .

University Service

Member	College of Engineering Faculty Search Committee, UTA, 2009–2010.
Member	IMSE Faculty Search Committee, UTA, 2008–present.
Member	College of Engineering Research Committee, UTA, 2006–present.
Member	Associate Vice President Search Committee, UTA, 2006.
Member	Research Advisory Council, UTA, 2006.
Member	Arlington Research & Technology Initiative, UTA, 2006.
Chair	IMSE Research Committee, UTA, 2005–present.

Doctoral Students, as Major Advisor or Co-Advisor

John F. Dickson	2010–present.
Aera Kim LeBoulluec	2010–present (Co-Chair L. Zeng).
Diana Martinez Cepeda	2009–present.
Poovich Phaladiganon	2009–present (Co-Chair S. B. Kim).
Narakorn Engsuwan	2009–present (Co-Chair J. Rosenberger).
Bancha Ariyajunya	2008–present.
Adesina During	2008–present (Co-Chair H. W. Corley).
Pin Kung	2008–present.
Wei-Che Hsu	grad. 2011 (Co-Chair J. Rosenberger), <i>Mixed Integer Programming Models for Selecting Ground-Level Ozone Control Strategies</i> .
Subrat Sahu	grad. 2011, <i>Statistically Parsimonious Adaptive Dynamic Programming</i> . Currently at Caterpillar Inc.
Chingfeng Lin	grad. 2010, <i>A Pain Management Decision-Making Framework</i> .
Neelesh Sule	grad. 2008 (Co-Chair M. Sattler), <i>Assessing Control Strategies for Ground Level Ozone</i> , Currently at Providence Engineering.
Huiyuan Fan	grad. 2008, <i>Sequential Frameworks for Statistics-Based Value Function Representation in Approximate Dynamic Programming</i> . Currently at Rolls Royce.
Prashant Tarun	grad. 2008 (Co-Chair H. W. Corley), <i>A Dynamic Multiple Stage, Multiple Objective Optimization Model with an Application to Wastewater Treatment</i> . Currently at Missouri Western State University.
Durai Sundaramoorthi	grad. 2007 (Co-Chair J. Rosenberger), <i>A Data-Integrated Simulation Optimization Approach for Nurse Assignment</i> . Currently at Washington University at St. Louis.
Thomas Shih	grad. 2006, <i>Convex Versions of Multivariate Adaptive Regression Splines and Implementations for Complex Optimization Problems</i> . Currently at Conifer Health Solutions, Dallas, TX.
Sheela Siddappa	grad. 2006 (Co-Chair J. Rosenberger), <i>Statistical Modeling Approach to Airline Revenue Management with Overbooking</i> . Currently at General Motors, Bangalore, India.
Venkata Pilla	grad. 2006 (Co-Chair J. Rosenberger), <i>Robust Airline Fleet Assignment</i> . Currently at American Airlines, Irving, TX.

Doctoral Students, as Major Advisor or Co-Advisor (continued)

Aihong Wen	grad. 2005, <i>Statistics-Based Approaches for Stochastic Optimal Control</i> . Currently at CSX Corp., Jacksonville, FL.
Terrence Murphy	grad. 2004 (Co-Chair K.-L. Tsui), <i>Multivariate Quality Control Using Loss-Scaled Principal Components</i> . Currently at Yale University, New Haven, CT.
Zehua Yang	grad. 2004, <i>A Decision-Making Framework for Ozone Pollution Control</i> . Currently at Abbott Laboratories, Dallas, TX.
Julia Tsai	grad. 2002, <i>Statistical Modeling of the Value Function in High-Dimensional, Continuous-State SDP</i> . Currently at Joy You Industrial Corporation, Chicago, IL.
Dirk Günther	grad. 1998 (Co-Chair E. L. Johnson), <i>Airline Revenue Management</i> . Currently at Sabre, Witten, Germany.

Masters' Students Supported

Karthik Rajpurohit	Department of Energy, Sep.- Dec. 2008.
Ashishgiri Goswami	Dallas-Fort Worth International Airport, Jun. 2008-Aug. 2010.
Poovich Phaladiganon	Luminant Power, Jan.-Dec. 2008.
Dilbar Singh Saini	TXU/Luminant Power, Jan.-Dec. 2007.
Bhavinkumar Patel	Dallas-Fort Worth International Airport, Jun.-Aug. 2007.
Rajeev Kumar	Dallas-Fort Worth International Airport, Jun.-Aug. 2006.
Vikranth Gopalakrishnan	National Science Foundation, Jun.-Aug. 2004.

Undergraduate Students Supported

Paul Wilson	UTA, Department of Energy, 2009-present.
Kerry Stuewer	Northwestern University, Dallas-Fort Worth International Airport, 2008.
Kobi Abayomi	Georgia Tech, Undergraduate Research Internship Program, 1999-2000.

Course Instruction - UTA

Engineering Probability (undergraduate)	5 semesters
Advanced Engineering Statistics (graduate)	16 semesters
Design of Experiments (graduate)	9 semesters
RSM and Computer Experiments (graduate)	4 semesters
Business Statistics I (undergraduate)	2 semesters
Operations Management (graduate)	one semester
Logistics Modeling (graduate/undergraduate)	one semester

Median Teaching Scores - UTA (out of 5.0)

Graduate Courses	
<i>Teaching Effectiveness: 4.7, Instructor Support: 4.8</i>	
Undergraduate Courses	
<i>Teaching Effectiveness: 4.3, Instructor Support: 4.5</i>	

Course Instruction - Georgia Tech

Statistical Modeling and Design of Expts. (graduate)	3 semesters (including 2 on video)
Basic Statistical Methods (undergraduate)	one semester
Applied Regression Analysis (graduate)	8 quarters (including 3 on video)
Design of Experiments (graduate)	4 quarters (including 2 on video)
Engineering Statistics I (undergraduate)	3 quarters
Engineering Statistics II (undergraduate)	3 quarters
Probabilistic Operations Research (undergraduate)	4 quarters

Median Teaching Scores - Georgia Tech (out of 5.0)

Graduate Courses

Teaching Effectiveness: 4.3, Instructor Support: 4.3

Undergraduate Courses

Teaching Effectiveness: 4.1, Instructor Support: 4.1

Programming Skills

Programming Languages: C, Pascal, Fortran.

Technical Packages: Minitab, SAS, Matlab, S-Plus, NAG libraries.

Other Packages: L^AT_EX, Microsoft Word, Microsoft Excel, Adobe Illustrator.

Other Activities

Mentor	UTA Faculty Mentoring Program (Mentee: M. Kathryn Shields), 2004–05.
Mentor	MentorNet (Mentee: Jessica Kleiss), 2003–05.
Participant	Women in Engineering Leadership (WELI), Salt Lake City, UT, Nov. 2003.
Member	The UTA Dance Ensemble, 2003–present.
Instructor	Options course on Modern Dance, Georgia Tech, 1999–2001.
Member	Orchesis I Dance Company, Iowa State Univeristy, 1996.
Representative	Graduate Recruitment of Women, Georgia Tech, 1995.
Faculty Participant	Society of Women Engineers, Georgia Tech.
President	Operations Research Graduate Association, Cornell University, 1991–92.
Dancer	Theatre Arts Dept. (11 performances), Cornell Univeristy, 1988–93.
Representative	Graduate Women in Engineering, Cornell University, 1991–92.
Workshop Leader	Expanding Your Horizons Conference, 1991 and 1992.
President	ORSA Student Section, The Johns Hopkins University, 1987–88.
Member	The Johns Hopkins Dance Company, 1985–88.

Personal

Married to Jeffrey Guild, Ph.D.

Two sons: Aiden born 2004, Broderick born 2008.