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PERSONAL INFORMATION

Citizenship: U.S.

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EDUCATION

- | | | |
|-----|------|--|
| PhD | 1984 | Operations Research, School of Industrial Engineering,
Purdue University, West Lafayette, Indiana.
PhD Dissertation: "Stochastic Lifetimes: A General Model"
Major Professor: Bruce Schmeiser |
| MS | 1980 | Applied Math, Mathematics Department,
Purdue University, West Lafayette, Indiana.
Operations Research option. |
| BS | 1978 | Mathematics with a Computer Science minor,
Purdue University, West Lafayette, Indiana. |

EDITORIAL POSITIONS

Associate Editor, *Naval Research Logistics*, December, 2005–present.

Associate Editor, *IEEE Transactions on Reliability*, August, 1988–August, 1990.

Book Review Editor, *Journal of Quality Technology*, January, 1989–December, 1991.

Editorial Board, *IIE Transactions*, April, 1996–2002.

ACADEMIC POSITIONS

- 1992–pres. THE COLLEGE OF WILLIAM AND MARY DEPARTMENT OF MATHEMATICS: Associate Professor (1992–1996), Professor (1996–present), Professor and Chair (1999–2002)
- Calculus I, M 111: Harvard calculus curriculum: functions, derivatives, integrals, applications.
 - Applied Statistics I, M 351: Elementary probability theory, discrete and continuous distributions, statistical inference.
 - Probability and Statistics I, M 401/501: Combinatorial probability, random variables, common discrete and continuous distributions.
 - Operations Research: Stochastic models, M 424/524: Markov chains, queueing theory, inventory theory, discrete-event simulation.
 - Mathematical Statistics, M 452/552: random variables, probability, limiting distributions, estimation, statistical inference.
 - Reliability, CS 668: Reliability functions, lifetime distributions, competing risks, accelerated life & proportional hazards models, survival analysis.
 - Statistical Analysis of Simulation Models, CS 678: input modeling, variate generation, time series analysis, output analysis, ranking and selection.
 - Computational Probability, CS 688: Algorithms for transformations, products, sums, order statistics; applications from operations research.
 - Simulation, CS 698: SIMAN/ARENA simulation language, variate generation, input modeling, output analysis, variance reduction.

ACADEMIC POSITIONS (continued)

- 1984–1992 THE UNIVERSITY OF OKLAHOMA SCHOOL OF INDUSTRIAL ENGINEERING: Assistant Professor (1984–1990) and Associate Professor (1990–1992)
- Introduction to Industrial Engineering, IE 2011: Operations research, manufacturing, production, ergonomics.
 - Engineering Statistics, E 3293: Random variables, functions of random variables, multivariate random variables, point and interval estimation.
 - Reliability in Engineering Design, IE 5343: Coherent systems, parametric distributions, lifetime data analysis.
 - Statistical Analysis of Simulation Models, IE 5573: Random number generation, variate generation, input modeling, output analysis, VRTs.
 - Simulation of Industrial Systems, IE 5673: SLAM simulation language, variate generation, output analysis.
 - Quality Control and Reliability, IE 5970: Process control, acceptance sampling, reliability calculations, parametric distributions, life testing.
- 1981–1984 PURDUE UNIVERSITY SCHOOL OF INDUSTRIAL ENGINEERING: Graduate Instructor for
- Introduction to Industrial Engineering, IE 190: Probability, probability applications, statistical applications, engineering economics, computer applications, ergonomics.
 - Statistical Control I, IE 230: Random variables, distributions, descriptive statistics, point estimation, interval estimation, hypothesis testing.
 - Statistical Control II, IE 330: Nonparametric tests, regression, analysis of variance, quality control, reliability.
- 1980 BAYLOR UNIVERSITY MATHEMATICS DEPARTMENT: Lecturer for undergraduate mathematics courses for business and science majors.
- 1978–1980 PURDUE UNIVERSITY MATHEMATICS DEPARTMENT: Teaching assistant for differential calculus, integral calculus, multivariate calculus, differential equations and linear algebra.
- 1976–1978 PURDUE UNIVERSITY: Tutoring and grading for undergraduate algebra, trigonometry and computer science courses.

PROFESSIONAL ASSOCIATIONS

American Statistical Association
Institute for Operations Research and the Management Sciences
Institute of Industrial Engineers

PROFESSIONAL CERTIFICATIONS

Passed Actuarial Exams 1, 2, and 3.

HONORS, PRIZES AND AWARDS

INFORMS Computing Society Prize, 2006.

Simon Prize, for Excellence in Mathematics Instruction, 2003.

Golden Key National Honorary Society Faculty Inductee, William & Mary Chapter, 1995.

Al Plait Best Tutorial Award, 1995 Annual Reliability and Maintainability Symposium.

Outstanding Professor, University of Oklahoma Student IIE Chapter, 1992.

NSF Workshop on Computational Algebra Applications in Science and Engineering, 1992.

Outstanding Professor, University of Oklahoma Student IIE Chapter, 1990.

Outstanding Professor, University of Oklahoma Student IIE Chapter, 1989.

Ellis R. Ott Foundation Technical Paper Competition (QC), 1989, Honorable Mention.

1988 Amoco Good Teaching Award, University of Oklahoma.

Finalist, 1988 Franz Edelman Award for Management Science Achievement, 17th Annual International Prize Competition, The Institute of Management Sciences. Honorable Mention.

Visiting Scholar, Air Force Institute of Technology Reliability Engineering Design Workshop, 1987.

Sigma Xi, The Scientific Research Society Honorary of North America, 1987.

Outstanding Professor, University of Oklahoma Student IIE Chapter, 1987.

Ralph R. Teetor Educational Award, Society of Automotive Engineers, 1987.

University of Oklahoma Engineering Associates Distinguished Lectureship, 1986–1987, 1987–1988, 1988–1989.

Brandon H. Griffith Outstanding Faculty Award, University of Oklahoma College of Engineering, 1985.

David Ross Scholarship, Purdue Research Foundation, spring, 1983.

Magoon Graduate Instructor Award, Purdue University, 1982, 1983, 1984.

Purdue Engineering Scholarship, summer 1982.

Phi Eta Sigma (freshman scholastic honorary), 1976.

Biographical entries: Who's Who in Finance and Business (2006–2007, 35th Edition). Who's Who in America (2005, 59th Edition; 2007, 61st Edition; 2009, 63rd Edition). Who's Who Among America's Teachers (2002, 7th Edition). International Directory of Distinguished Leadership (1987, 1988, 2001, 2002). Who's Who (1997–1998 Edition). Who's Who in Science and Engineering (1996–1997, 3rd Edition; 1998–1999, 4th Edition; 2000–2001, 5th Edition; 2005–2006, 8th Edition; 2006–2007, 9th Edition; 2008–2009, 10th Edition). Who's Who in the World (2005, 22nd Edition; 2007 24th Edition). Who's Who in American Education (1992–1993, 3rd Edition; 2004–2005, 6th Edition; 2006–2007, 7th Edition; 2007–2008, 8th Edition). Who's Who in the South and Southwest (1986–1987, 20th Edition; 1988–1989, 21st Edition; 1989–1990, 22nd Edition). Community Leaders of America (1987, 1988). Who's Who of Emerging Leaders in America (1987, 1st Edition; 1988, 2nd Edition; 1990, 3rd Edition). Personalities of the Americas (1987). Dictionary of International Biography (1986). Men of Achievement (1986, 12th Edition and 1988, 13th Edition). Outstanding Young Men of America (1985, 1986). Personalities of America (1984, 1986).

CONSULTING POSITIONS / WORK EXPERIENCE

Summer	2008	LIEBHERR MINING EQUIPMENT, INC.: Reliability analysis and spares optimization model.
Summer	2003	POAMAX, INC.: Statistical sampling and reliability analysis for a medical device.
Summer	2001	PROMODEL CORPORATION: Developed algorithms for generating event times for a nonhomogeneous Poisson process from count data.
Spring	1999	WOODMIZER, INC.: Analyzed an inquiry database using logistic regression.
Summer	1998	YORKTOWN NAVAL WEAPONS STATION: Analyzed sampling plans and missile failure data. Several contracts through the present.
Summer	1995	PRICE-TRAC, INC.: Developed mathematical models for promotion analysis in the supermarket industry.
Summer	1994	ICASE: Worked with a team on performance modeling in a visiting research position.
Summer	1993	ICASE: Worked with a team on reliability applications in a visiting research position.
Summer	1991	DEPARTMENT OF DEFENSE: Analyzed existing life test procedures for the SINCGARS system and proposal of new life test procedures.
Summer	1990	KOMAG, INC.: Analyzed disk drive lifetime data at accelerated environmental conditions.
Summer	1990	FEDERAL AVIATION ADMINISTRATION: Team-taught a course on quality control and reliability to quality assurance personnel at the FAA training center. Course also taught in 1986, 1988 and 1989.
Summer	1989	TINKER AIR FORCE BASE: Taught a course in simulation modeling to engineers involved with Air Force engine maintenance and overhaul.
Fall	1987	MAGNETIC PERIPHERALS, INC.: Taught an extension course on Reliability in Engineering Design to engineers at MPI's disk drive manufacturing facility in Oklahoma City.
Summer	1987	AT&T CORPORATE EDUCATION CENTER: Team-taught a course on modeling and simulation of manufacturing processes to engineers at Oklahoma City, Boston and Princeton facilities.
Fall	1985	AT&T TECHNOLOGIES: Taught a course on simulation techniques and the SLAM simulation language to engineers at AT&T's Oklahoma City manufacturing facility.
Summer	1985	NASA/LANGLEY RESEARCH CENTER: Developed simulation models used in planning the transportation systems for the Space Station.
Summer	1985	FEDERAL AVIATION ADMINISTRATION: Revised a reliability and maintainability chapter in a short course text.
Summer	1983	DELCO ELECTRONICS: Designed and ran simulation experiments relating to an inventory problem experienced in microprocessor fabrication.
Summer	1981	NISUS CORPORATION: Vice president of programming: Managed a staff of programmers writing custom microcomputer software.
Summer	1980	LEEMIS MARKETING CONSULTANTS: Designed software to track supermarket facing data for market analysis.
Summer	1979	ARGONNE NATIONAL LABORATORY: Assisted users of computer services debugging FORTRAN programs running on the laboratory's IBM 3033, 370/195 and 360/75.
Spring	1978	DUNN & HARGITT: Designed forecasting and graphics software used to analyze stock market trends.
Summer	1977	OAKBROOK DATA CENTER: Operated computer and off-line printer for a data processing service bureau.

PUBLICATIONS (lead author indicated by *)

Textbooks:

Reliability: Probabilistic Models and Statistical Methods, 1995, Prentice–Hall, Inc.* 319 pages. ISBN: 0–13–720517–1, International version ISBN: 0–13–437260–3, solutions manual, 304 pages, ISBN: 013–721912–1. ASQC (American Society for Quality Control) CRE (Certified Reliability Engineer) course materials listed this text as one of three sources for reading about “Mathematical Models” in reliability.

Discrete-Event Simulation: A First Course (with S. Park), 2006, Prentice–Hall, Inc.* 604 pages. ISBN: 0–13–142917–5. Solutions manual, 273 pages.

Computational Probability: Algorithms and Applications in the Mathematical Sciences (with John Drew, Diane Evans, and Andy Glen), 2008, Springer. 217 pages. ISBN: 978–0–387–74675–3.

Textbook Chapters:

1990 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Statistical Models and Methods in Reliability”*.

1991 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

Excellence in Management Science Practice—A Readings Book, A. Assad, E. Wasil and G. Lilien, eds., Chapter titled: “An Application of Simulation and Network Analysis to Capacity Planning and Material Handling Systems at Tinker Air Force Base” (with A. Ravindran, B. Foote, A. Badiru, and L. Williams), 349–362, Prentice–Hall, 1992.

1992 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

Advances in Reliability, A. Basu, ed., Chapter titled: “Variate Generation for Monte Carlo Analysis of Reliability and Lifetime Models” (with L. Shih), 247–256, Elsevier Science Publishers, 1993*.

1993 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

1994 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

1995 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

1996 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

1997 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probabilistic Models and Statistical Methods in Reliability”*.

Wiley Encyclopedia of Electrical and Electronics Engineering, Volume 13, John G. Webster, Editor, Section titled: “Monte Carlo Simulation,” 532–540, John Wiley and Sons, Inc., New York, 1999*.

CRC Handbook of Discrete and Combinatorial Mathematics, Kenneth H. Rosen, Editor-in-chief, Section titled: “Simulation,” 484–494, CRC Press, Boca Raton, Florida, 2000*.

2003 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: “Probability Models and Statistical Methods in Reliability”.

PUBLICATIONS (continued)

- 2004 Annual Reliability and Maintainability Symposium Tutorial Notes, Chapter titled: "Probability Models and Statistical Methods in Reliability".
- Encyclopedia of RF and Microwave Engineering*, Kai Chang, Editor, entry titled: "Monte Carlo Simulation in Reliability," John Wiley and Sons, 3269–3277*.
- Handbooks in Operations Research and Management Science: Simulation*, Chapter 6 titled: "Arrival processes, Random Lifetimes Random Objects," 155–180, B.L. Nelson and S.G. Henderson, Editors, Elsevier/North–Holland, 2006*.
- Encyclopedia of Measurement and Statistics, Entry titled: "Simulation Experiments," Volume 3, 901–903, Neil Salkind, Editor, Thousand Oaks, CA, SAGE Publications, Inc., 2007*.
- Operations Research and Management Science Handbook, Chapter 17 titled: "Reliability," 17--1–17--41, A. Ravi Ravindran, Editor, CRC Press, 2008*.
- Encyclopedia of Statistics in Quality and Reliability, "Computational Algebra Methods for System Reliability," 1972–1977, F. Ruggeri, R. Kenett, F. Faltin, Editors, John Wiley and Sons, 2007.
- Handbook of Military Industrial Engineering, Chapter titled: "Lower System Reliability Bounds from Binary Failure Data Using Bootstrapping," A. Badiru and M. Thomas, Editor, Forthcoming, 2009*.

Reviews, Letters, and Notes:

- "Hypergeometric Random Variable Limits," *The American Statistician*, Volume 41, Number 1, February, 1987, 88*.
- Book Review: *Reliability for the Technologies*, John Doty, Quality Press, 1985, *Journal of Quality Technology*, Volume 21, Number 1, January, 1989, 79–80*.
- Book Review: *Reliability-Based Design in Civil Engineering*, Milton E. Harr, McGraw–Hill, 1988, *Technometrics*, Volume 31, Number 1, February, 1989, 126*.
- Book Review: *Reliability Modelling and Applications*, A.G. Colombo and A.Z. Keller, eds., D. Reidel Publishing Company, 1988, *Technometrics*, Volume 31, Number 2, May, 1989, 268*.
- Book Review: *Statistical Reliability Theory*, I. Gertsbakh, Marcel Dekker, Inc., 1989, *Journal of Quality Technology*, Volume 22, Number 1, January, 1990, 84–85*.
- Book Review: *Applied Linear Regression Models, Second Edition*, J. Neter, W. Wasserman, M. Kutner, Irwin, 1989, *Journal of Quality Technology*, Volume 23, Number 1, January, 1991, 76–77*.
- Book Review: *An Elementary Guide to Reliability, Fourth Edition*, G.W.A. Dummer and R.C. Winton, *Journal of Quality Technology*, Volume 23, Number 3, July, 1991, 267–268*.
- Book Review: *Risk: Analysis, Assessment and Management*, J. Ansell and F. Wharton, *Interfaces*, Volume 24, Number 2, March–April, 1994, 134–135.
- "A Comparison of Approximate Interval Estimators for the Bernoulli Parameter," *The American Statistician*, Volume 50, Number 4, November, 1996, 388–389*.
- Software Review: "Stat::Fit: Fitting Continuous and Discrete Distributions to Data," *OR/MS Today*, Volume 29, Number 3, June, 2002, 52–55*.

PUBLICATIONS (continued)

Journal Articles:

- “Random Variate Generation for Monte Carlo Experiments” (with B. Schmeiser), *IEEE Transactions on Reliability*, Volume R-34, Number 1, April, 1985, 81–85*.
- “Relationships Among Common Univariate Distributions,” *The American Statistician*, Volume 40, Number 2, May, 1986, 143–146*.
- “Lifetime Distribution Identities,” *IEEE Transactions on Reliability*, Volume R-35, Number 2, June, 1986, 170–174*.
- “Variate Generation for the Accelerated Life and Proportional Hazards Models,” *Operations Research*, Volume 35, Number 6, November–December, 1987, 892–894*.
- “Spectral Analysis in Quality Control: A Control Chart Based on the Periodogram” (with M. Beneke, R. Schlegel, and B. Foote), *Technometrics*, Volume 30, Number 1, February, 1988, 63–70.
- “Probabilistic Properties of the Exponential Distribution,” *Microelectronics and Reliability*, Volume 28, Number 2, 1988, 257–262*.
- “Mechanized Material Handling Systems Design and Routing” (with A. Ravindran, B. Foote, A. Badiru, L. Williams), *Computers and Industrial Engineering*, Volume 14, Number 3, 1988, 251–270.
- “Simulation and Network Analysis Payoff in Conveyor System Design” (with B. Foote, A. Ravindran, A. Badiru, and L. Williams), *Industrial Engineering*, Volume 20, Number 6, June, 1988, 48–53.
- “Confidence Interval Scatterplots for Evaluating Confidence Interval Procedures” (with M. Subramaniam), *Journal of Statistical Computation and Simulation*, Volume 30, Number 2, 1988, 129–144.
- “Network Reliability and Availability Analysis to Minimize Downtime Costs for Communication Networks” (with S. Pulat), *Microelectronics and Reliability*, Volume 29, Number 1, 1989, 37–48.
- “An Application of Simulation and Network Analysis to Capacity Planning and Material Handling Systems at Tinker Air Force Base” (with A. Ravindran, B. Foote, A. Badiru, and L. Williams), *Interfaces*, Volume 19, Number 1, January/February, 1989, 102–115.
- “Statistical Procedures for the Exponential Power Distribution” (with V. Koh), *Microelectronics and Reliability*, Volume 29, Number 2, 1989, 227–236.
- “Component vs. System Burn-in Techniques for Electronic Equipment” (with C. Whitbeck), *IEEE Transactions on Reliability*, Volume 38, Number 2, June, 1989, 206–209.
- “Exponential Parameter Estimation for Data Sets Containing Left and Right Censored Observations” (with L. Shih), *Communications in Statistics—Simulation and Computation*, Volume B18, Number 3, 1989, 1077–1086*.
- “Burn-in Models and Methods: A Review” (with M. Beneke), *IIE Transactions*, Volume 22, Number 2, March, 1990, 172–180*.
- “Variate Generation for the Accelerated Life and Proportional Hazards Models with Time Dependent Covariates” (with L. Shih and K. Reynertson), *Statistics and Probability Letters*, Volume 10, Number 1, 1990, 335–339*.

PUBLICATIONS (continued)

- “Job Shop Configuration Optimization at Tinker Air Force Base” (with A. Ravindran, B. Foote, A. Badiru, L. Williams), *Simulation*, Volume 54, Number 6, June, 1990, 287–290*.
- “Nonparametric Estimation of the Intensity Function for a Nonhomogeneous Poisson Process,” *Management Science*, Volume 37, Number 7, July, 1991, 886–900*.
- “Optimization Techniques for System Reliability: A Review” (with A. Mohamed and A. Ravindran), *Reliability Engineering and System Safety*, Volume 35, Number 2, 1992, 137–146.
- “Variate Generation for Nonhomogeneous Poisson Processes with Time Dependent Covariates” (with L. Shih), *Journal of Statistical Computation and Simulation*, Volume 44, 1993, 165–186.
- “Recovering from a Crisis at Tinker Air Force Base” (with A. Badiru, L. Williams, B. Foote, A. Ravindran and L. Williams), *PM NETWORK*, Volume 7, Number 2, 1993, 10–23.
- “On the minimum of independent geometrically distributed random variables” (with G. Ciardo, D. Nicol), *Statistics & Probability Letters*, Volume 23, 1995, 313–326.
- “A Comparison of Approximate Interval Estimators for the Bernoulli Parameter” (with K. Trivedi), *The American Statistician*, Volume 50, Number 1, May, 1996, 63–68*.
- “Computational Algebra Applications in Reliability” (with G. Hartless), *IEEE Transactions on Reliability*, Volume 45, Number 3, September, 1996, 393–399.
- “The Arctangent Survival Distribution” (with A. Glen), *Journal of Quality Technology*, Volume 29, Number 2, April, 1997, 205–210.
- “A Generalized Univariate Change-of-Variable Transformation Technique” (with A. Glen, J. Drew), *INFORMS Journal on Computing*, Volume 9, Number 3, Summer, 1997, 288–295.
- “Computing the Cumulative Distribution Function of the Kolmogorov–Smirnov Statistic” (with J. Drew, A. Glen), *Computational Statistics and Data Analysis*, Volume 34, Number 1, 28 July, 2000, 1–15.
- “Nonparametric Estimation of the Cumulative Intensity Function for a Nonhomogeneous Poisson Process from Overlapping Intervals” (with B. Arkin), *Management Science*, Volume 46, Number 7, July, 2000, 989–998.
- “Survival Distributions and Benford’s Law” (with B. Schmeiser, D. Evans), *The American Statistician*, Volume 54, Number 4, November, 2000, 236–241*.
- “APPL: A Probability Programming Language” (with A. Glen, D. Evans), *The American Statistician*, Volume 55, Number 2, May, 2001, 156–166.
- “Application of Transformed Order Statistics to Goodness of Fit Testing” (with A. Glen, D. Barr), *IEEE Transactions on Reliability*, Volume 50, Number 2, June, 2001, 209–213.
- “An Interactive Multicriteria Availability Allocation Algorithm” (with A. Mohamed, A. Ravindran), *International Journal of Operations and Quantitative Management*, Volume 8, Number 1, March, 2002, 1–20.

PUBLICATIONS (continued)

- “Computing the Nonparametric Estimator of the Survivor Function When All Observations are Either Left- or Right-Censored with Tied Observation Times,” *Computers and Operations Research*, Volume 29, 2002, 423–431*.
- “Computing the Distribution of the Product of Two Continuous Random Variables” (with A. Glen, J. Drew), *Computational Statistics and Data Analysis*, Volume 44, Number 3, January, 2004, 451–464.
- “Nonparametric Estimation and Variate Generation for a Nonhomogeneous Poisson Process from Event Count Data,” *IIE Transactions*, Volume 36, Number 12, December, 2004, 1155–1160*.
- “Algorithms for Computing the Distributions of Sums of Discrete Random Variables” (with D. Evans), *Mathematical and Computer Modelling*. Volume 40, Number 13, 2004, 1429–1452.
- “The Distribution of Order Statistics for Discrete Random Variables with Applications to Bootstrapping” (with D. Evans and J. Drew), *INFORMS Journal on Computing*, Volume 18, Number 1, Winter, 2006, 19–30.
- “Lower System Reliability Bounds from Binary Failure Data Using Bootstrapping,” *Journal of Quality Technology*, Volume 38, Number 1, January, 2006, 2–13*.
- “Minimum Kolmogorov–Smirnov Test Statistic Parameter Estimates” (with M. Weber, R. Kincaid), *Journal of Statistical Computation and Simulation*, Volume 76, Number 3, 2006, 195–206.
- “Algorithms to Calculate the Distribution of the Longest Path Length of a Stochastic Activity Network with Continuous Activity Durations” (with M. Duggan, J. Drew, J. Mallozzi, K. Connell), *Networks*, Volume 48, Issue 3, October, 2006, 143–165*.
- “Univariate Distribution Relationships” (with J. Taber), *The American Statistician*, Volume 62, Number 1, February 2008, 45–53*.
- “The Logistic–Exponential Survival Distribution” (with Y. Lan), *Naval Research Logistics* Volume 55, Number 3, 252–264.
- “Model Discrimination for Heavily Censored Survival Data” (with D. Block), *IEEE Transactions on Reliability*, Volume 57, Number 2, June, 2008, 248–259.
- “The Distribution of the Kolmogorov–Smirnov, Cramer–von Mises, and Anderson–Darling Test Statistics for Exponential Populations with Estimated Parameters” (with D. Evans, J. Drew), *Communications in Statistics---Simulation and Computation*, Volume 37, Number 7, August, 2008, 1396–1421.
- “Testing Conformance to Benford’s Law” (with W.H. Kaczynski), Technical Report, The College of William and Mary, Department of Mathematics, submitted for publication.
- “Nonparametric Random Variate Generation Using a Piecewise-Linear Cumulative Distribution Function” (with W. H. Kaczynski, N. A. Loehr, J. T. McQueston), Technical Report, The College of William and Mary, Department of Mathematics, submitted for publication.
- “Bivariate Nonparametric Random Variate Generation Using a Piecewise-Linear Cumulative Distribution Function” (with W. H. Kaczynski, N. A. Loehr, J. T. McQueston), Technical Report, The College of William and Mary, Department of Mathematics, submitted for publication.

PUBLICATIONS (continued)

Proceedings (all are refereed or invited):

- “The General Lifetime Model Software,” Proceedings of the Midwest Section ASEE 20th Annual Meeting, Columbia, Missouri, March 20–22, 1985, 26–37*.
- “Using Spectral Analysis to Detect Cyclic Variation in Industrial Processes” (with M. Beneke), Proceedings, Central State Applied Mathematics Conference, April, 1986, 15–24.
- “Analysis of Capacity Planning and Material Handling Systems: A Case Study” (with L. Williams, A. Ravindran, B. Foote and A. Badiru), Proceedings, 1986 International Industrial Engineering Conference, 153–162.
- “Topics in Variate Generation of Lifetimes for Monte Carlo Simulation Studies,” Computer and Information Systems Newsletter, Volume 22, Number 2, 1988, 1–3*.
- “Software for the Analysis of Survival Data” (with B. Norman), Proceedings of the ASEE 23rd Annual Meeting, Norman, Oklahoma, March 30–April 1, 1988, Section IIIB, 9–20*.
- “Visual Assessment vs. Statistical Goodness of Fit Tests for Identifying Parent Population” (with M. Berry, B. Peacock, and B. Foote), Proceedings of the 32nd Annual Human Factors Society Meeting, Anaheim, California, October 24–28, 1988, 460–464.
- “Input Modeling,” In *Proceedings of the 1994 Winter Simulation Conference*, J.D. Tew, S. Manivannan, D.A. Sadowski, and A.F. Seila, eds., Institute of Electrical and Electronics Engineers, San Francisco, 1994, 55–61*.
- “Input Modeling for Discrete-Event Simulation,” In *Proceedings of the 1995 Winter Simulation Conference*, C. Alexopoulos, K. Kang, W.R. Lilegdon, D. Goldsman, eds. Institute of Electrical and Electronics Engineers, Arlington, Virginia, 1995, 16–23*.
- “Discrete-Event Simulation Input Process Modeling,” In *Proceedings of the 1996 Winter Simulation Conference*, J. Charnes, D. Morrice, D. Brunner, J. Swain, eds. Institute of Electrical and Electronics Engineers, Coronado, California, 1996, 39–46*.
- “Seven Habits of Highly Successful Input Modelers,” In *Proceedings of the 1997 Winter Simulation Conference*, S. Andradottir, K.J. Healy, D.H. Withers, B.L. Nelson, eds. Institute of Electrical and Electronics Engineers, Atlanta, Georgia, 1997, 39–46*.
- “Input Modeling,” In *Proceedings of the 1998 Winter Simulation Conference*, D.J. Medeiros, E.F. Watson, J.S. Carson, M.S. Manivannan, eds. Institute of Electrical and Electronics Engineers, Washington, DC, 1998, 15–22*.
- “Simulation Input Modeling,” In *Proceedings of the 1999 Winter Simulation Conference*, P. Farrington, H. Black-Nembhard, D. Sturrock, G. Evans, eds., Institute of Electrical and Electronics Engineers, Phoenix, Arizona, 1999, 14–23*.
- “Input Modeling Using a Computer Algebra System” (with Diane Evans), In *Proceedings of the 2000 Winter Simulation Conference*, J.A. Joines, R.R. Barton, K. Kang, P.A. Fishwick, eds., Institute of Electrical and Electronics Engineers, Orlando, Florida, 2000, 577–586*.
- “Probability Calculations in a Computer Algebra System,” (with D.L. Evans) In Proceedings of the Section on Statistical Education, American Statistical Association, 2000, 236–240.

PUBLICATIONS (continued)

- “An Interactive Search Method for Multicriteria Nonlinear Programming” (with A. Mohamed, A. Ravindran), *Proceedings of the 31st Annual Meeting of the Decision Sciences Institute*, Orlando, Florida, November 18–21, 2000, 902–904.
- “Input Modeling,” In *Proceedings of the 2000 Winter Simulation Conference*, J.A. Joines, R.R. Barton, K. Kang, P.A. Fishwick, eds., Institute of Electrical and Electronics Engineers, Orlando, Florida, 2000, 17–25*.
- “Input Modeling Techniques for Discrete-Event Simulations,” In *Proceedings of the 2001 Winter Simulation Conference*, B.A. Peters, J.S. Smith, D.J. Medeiros, M.W. Rohrer, eds., Institute of Electrical and Electronics Engineers, Arlington, Virginia, 2001, 62–73*.
- “Current Issues in Simulation Input Modeling” (with R.R. Barton, R.C.H. Cheng, S.E. Chick, S.G. Henderson, A.M. Law, B.W. Schmeiser, L.W. Schruben, J.R. Wilson), In *Proceedings of the 2002 Winter Simulation Conference*, E. Yucesan, C.-H. Chen, J.L. Snowdon, J.M. Charnes, eds., Institute of Electrical and Electronics Engineers, San Diego, California, 2002, 353–369.
- “Using Simulation to Teach Probability” (with M. Rosenshine, R.R. Barton, D. Goldsman, B.L. Nelson), In *Proceedings of the 2002 Winter Simulation Conference*, E. Yucesan, C.-H. Chen, J.L. Snowdon, J.M. Charnes, eds., Institute of Electrical and Electronics Engineers, San Diego, California, 2002, 1815–1822.
- “Input Modeling,” In *Proceedings of the 2003 Winter Simulation Conference*, S. Chick, P.J. Sanchez, D. Ferrin, D.J. Morrice, eds., Institute of Electrical and Electronics Engineers, New Orleans, Louisiana, 2003, 14–24*.
- “Building Credible Input Models,” In *Proceedings of the 2004 Winter Simulation Conference*, R.G. Ingalls, M.D. Rossetti, J.S. Smith, B.A. Peters, eds., Institute of Electrical and Electronics Engineers, Washington, DC, 2003, 29–40*.
- “A Test of Randomness Based on the Distance Between Consecutive Random Number Pairs,” (with M. Duggan, J. Drew) In *Proceedings of the 2005 Winter Simulation Conference*, Kuhl, M.E., Steiger, N.M., Armstrong, F.B., Joines, J.A., eds., Institute of Electrical and Electronics Engineers, 2005, 741–748.
- “When Not to Simulate: Advances in Computational Probability,” paper AIAA–2006–7016 in the *Proceedings of the 11th AIAA/ISSMO Multidisciplinary Analysis and Optimization Conference*, Portsmouth, VA, September 6–8, 2006.
- “Simulation 101 Software: Workshop and Beyond” (with B.L. Lawson), In *Proceedings of the 2007 Winter Simulation Conference*, Henderson, S.G., Biller, B., Hsieh, M.--H., Shortle, J., Tew, J.D., Barton, R.R., eds., Institute of Electrical and Electronics Engineers, 2007, 233–236.
- “Monte Carlo and Discrete Event Simulations in C and R” (with B.L. Lawson), In *Proceedings of the 2008 Winter Simulation Conference*, Mason, S.J., Hill, R.R., Moench, L., Rose, O., eds., Institute of Electrical and Electronics Engineers, Forthcoming 2008.

INVITED LECTURES/PAPER PRESENTATIONS (co-authors/panel members not listed)

- “Computational Probability: Algorithms, Implementation, and Applications,” Seminar talk, Air Force Institute of Technology, March 6, 2008.
- “Benford’s Law Geometry,” Workshop on Benford’s Law, Santa Fe, New Mexico, December 17–18, 2007.
- “Simulation 101,” 2007 Winter Simulation Conference, Washington, DC, December 8–11, 2007.
- “Applications of A Probability Programming Language (APPL),” INFORMS Annual Meeting, Seattle, Washington, November 4–7, 2007. (ICS prize talk)
- “Simulation 101,” 2006 Winter Simulation Conference, Monterey, California, December 3–6, 2006.
- “Lower System Reliability Bounds from Binary Failure Data Using Bootstrapping,” Fall Technical Conference, Columbus, Ohio, October 12–13, 2006.
- “When Not to Simulate: Advances in Computational Probability,” 11th AIAA / ISSMO Multidisciplinary Analysis and Optimization Conference, Portsmouth, Virginia, September 6–8, 2006.
- “A Test of Randomness Based on the Distance Between Consecutive Random Number Pairs,” 2005 Winter Simulation Conference, Orlando, December 4–7, 2005.
- “Computer Algebra Applications in Reliability,” INFORMS National Meeting, San Francisco, November 13–16, 2005.
- Panel session, CDAS Statistics Conference, United States Military Academy, West Point, October 27, 2005.
- “Computational Probability,” Department of Mathematics and Computer Science, University of Richmond, February 21, 2005.
- “Building Credible Input Models,” 2004 Winter Simulation Conference, Washington, DC, December 5–8, 2004.
- “Discrete-Event Simulation: An Introduction,” NASA/Langley Research Center, August 13, 2004.
- “Probabilistic Models and Statistical Methods in Reliability,” 2004 Annual Reliability and Maintainability Symposium, Los Angeles, January 26–29, 2004.
- “Input Modeling,” 2003 Winter Simulation Conference, New Orleans, Louisiana, December 7–10, 2003.
- “Estimating and simulating nonhomogeneous Poisson processes,” International Conference on Reliability and Survival Analysis (ICRSA), The University of South Carolina, May 21–24, 2003.
- “Probabilistic Models and Statistical Methods in Reliability,” 2003 Annual Reliability and Maintainability Symposium, Tampa, January 27–30, 2003.
- “Current Issues in Simulation Input Modeling,” 2002 Winter Simulation Conference, San Diego, California, December 8–11, 2002.
- “Using Simulation to Teach Probability,” 2002 Winter Simulation Conference, San Diego, California, December 8–11, 2002.
- “Computational Probability,” Statistics Section, VAS Chapter, American Statistical Association, Hampton, Virginia, May 23, 2002.

INVITED LECTURES & PAPER PRESENTATIONS (continued)

- “Modeling and Simulating Nonstationary Arrivals for Discrete-Event Simulation” and “Input Modeling Using APPL,” Virginia Modeling and Simulation Center (VMASC) colloquium, Suffolk, Virginia, March 27, 2002.
- “Input Modeling Techniques for Discrete-Event Simulation,” 2001 Winter Simulation Conference, Arlington, Virginia, December 9–12, 2001.
- “Automating Probability,” Department of Industrial Engineering, Auburn University, November 15, 2001.
- “Symbolic Probability” (poster session), 2001 S-Plus User Conference Philadelphia, Pennsylvania, October 18–19, 2001.
- “Nonparametric Estimation of the Cumulative Intensity Function for a Nonhomogeneous Poisson Process from Multiple Realizations with Nonoverlapping and Overlapping Intervals,” Industrial Engineering Research Conference, Dallas, Texas, May 20–23, 2001.
- “Topics in Operations Research: Modeling Nonstationary Events and Symbolic Representation of Random Variables,” Department of Industrial and Systems Engineering, Virginia Tech, February 28, 2001.
- “Topics in Probability and Statistics: Modeling Arrivals to a Queue and Representing Random Variables in a Symbolic Language,” Department of Mathematics, Hope College, February 16, 2001
- “Input Modeling,” 2000 Winter Simulation Conference, Orlando, Florida, December 10–13, 2000.
- “Input Modeling Using a Computer Algebra System,” 2000 Winter Simulation Conference, Orlando, Florida, December 10–13, 2000.
- “APPL: A Probability Programming Language,” Joint Statistical Meetings, Indianapolis, Indiana, August 13–17, 2000.
- “Solving Probability and Mathematical Statistics Problems using a Computer Algebra System” (poster session), 2000 Summer Research Conference (sponsored by the Southern Regional Council on Statistics and ASA) Williamsburg, Virginia, June 5–8, 2000.
- “Nonparametric Estimation for Nonhomogeneous Poisson Process Models and Computational Probability,” Department of Industrial Engineering, North Carolina State University, March 6, 2000.
- “Simulation Input Modeling,” 1999 Winter Simulation Conference, Phoenix, Arizona, December 5–8, 1999.
- “Statistical Inference and Variate Generation for Nonhomogeneous Poisson Processes,” INFORMS National Meeting, Cincinnati, Ohio, May 2–5, 1999.
- “Computer Algebra Applications in Probability,” Northwestern University, Department of Industrial Engineering and Management Sciences Seminar, February 23, 1999.
- “Input Modeling,” 1998 Winter Simulation Conference, Washington, DC, December 13–16, 1998.
- “Computational Probability,” INFORMS National Meeting, Seattle, Washington, October 25–28, 1998.
- “Algorithms for Probability Calculations on Univariate, Continuous Random Variables Implemented in a Computer Algebra System,” Purdue University School of Industrial Engineering Seminar, September 8, 1998.

INVITED LECTURES & PAPER PRESENTATIONS (continued)

- “APPL: A Probability Programming Language,” Systems Engineering Department, United States Military Academy, August 14, 1998.
- “Seven Habits of Highly Successful Input Modelers,” 1997 Winter Simulation Conference, Atlanta, Georgia, December 7–10, 1997.
- “Computational Algebra Applications in Reliability,” INFORMS National Meeting, Dallas, Texas, October 26–29, 1997.
- “Symbolic Algebra Language Applications in Probability,” North Carolina State University Statistics Department Seminar talk, January 24, 1997.
- “Probabilistic Models and Statistical Methods in Reliability,” 1997 Annual Reliability and Maintainability Symposium, Philadelphia, January 13–16, 1997.
- “Overview of Applied Reliability,” ASA continuing education short course, Alexandria, Virginia, January 10, 1997.
- “Discrete-Event Simulation Input Process Modeling,” 1996 Winter Simulation Conference, Coronado, California, December 8–11, 1996.
- “Overview of Applied Reliability,” Joint Statistical Meetings, Chicago, August 4–8, 1996.
- “Estimation and Monte Carlo Simulation in Reliability,” 26th AMS–SIAM Summer Seminar in Applied Mathematics: Mathematics of Stochastic Manufacturing Systems, Williamsburg, Virginia, June 17–21, 1996.
- “Applications of Interval Estimators for the Bernoulli Parameter,” INFORMS National Meeting, Washington, DC, May 5–8, 1996.
- “Topics in Reliability Engineering,” University of Maryland at College Park, May 2, 1996.
- “Probabilistic Models and Statistical Methods in Reliability,” 1996 Annual Reliability and Maintainability Symposium, Las Vegas, January 22–25, 1996.
- “Input Modeling for Discrete-Event Simulation,” Winter Simulation Conference, Arlington, Virginia, December 3–6, 1995.
- “Survival Analysis,” 11th Annual EPA Conference on Statistics, Williamsburg, Virginia, February 27–March 2, 1995.
- “Probabilistic Models and Statistical Methods in Reliability,” 1995 Annual Reliability and Maintainability Symposium, Washington, DC, January 16–19, 1995.
- “Input Modeling,” Winter Simulation Conference, Orlando, December 11–14, 1994.
- “Reliability Models,” Industrial Engineering Research Conference, Atlanta, May 18–19, 1994.
- “Probabilistic Models and Statistical Methods in Reliability,” ACM Sigmetrics Conference on Measurement and Modeling of Computer Systems, Nashville, May 16–20, 1994.
- “Probabilistic Models and Statistical Methods in Reliability,” 1994 Annual Reliability and Maintainability Symposium, Anaheim, January 24–27, 1994.
- “Generating Event Times for a Non-homogeneous Poisson Process,” TIMS/ORSA Joint National Meeting, Chicago, May 16–19, 1993.
- “Probabilistic Models and Statistical Methods in Reliability,” 1993 Annual Reliability and Maintainability Symposium, Las Vegas, January 25–28, 1993.

INVITED LECTURES & PAPER PRESENTATIONS (continued)

- “An Interactive Search Method for Multi-Criteria Nonlinear Programs,” ORSA/TIMS Joint National Meeting, San Francisco, November 1–4, 1992.
- “Probabilistic Models and Statistical Methods in Reliability,” 1992 Annual Reliability and Maintainability Symposium, Las Vegas, January 20–23, 1992.
- “Multicriteria Optimization Applied to Systems of Repairable Components,” ORSA/TIMS Joint National Meeting, Anaheim, November 3–6, 1991.
- “Variate Generation for Monte Carlo Analysis of Reliability and Lifetime Models,” Fourth International Research Conference on Reliability, Columbia, Missouri, June 19–22, 1991.
- “The Nonhomogeneous Poisson Process with Covariates and its Application to Repairable Systems,” TIMS/ORSA Joint National Meeting, Nashville, May 12–15, 1991.
- “Probabilistic Models and Statistical Methods in Reliability,” 1991 Reliability and Maintainability Symposium, Orlando, January 28–31, 1991.
- “Probabilistic Models and Methods in Reliability,” 1990 Reliability and Maintainability Symposium, Los Angeles, January 22–25, 1990.
- “Variate Generation for Lifetime Regression Models with Time Dependent Covariates,” CORS/TIMS/ORSA Joint National Meeting, Vancouver, May 8–10, 1989.
- “Statistical Procedures for the Exponential Power Distribution,” Joint Statistical Meetings, New Orleans, August 22–25, 1988.
- “Software for the Analysis of Survival Data,” ASEE 23rd Annual Midwest Section Meeting, Norman, Oklahoma, March 30–April 1, 1988.
- “Variate Generation for Reliability Models,” ORSA/TIMS Joint National Meeting, St. Louis, October 25–28, 1987.
- “Optimal Burn-in Test Procedure: An Approach Based on Lifetime Data” (with V. Koh), Joint Statistical Meetings, San Francisco, August 17–20, 1987.
- “Using Spectral Analysis to Detect Cyclic Variation in Industrial Processes,” Central State Applied Mathematics Conference, Edmond, Oklahoma, April 18–19, 1986.
- “Determining Optimal Burn-in Time from Data,” TIMS/ORSA Joint National Meeting, Los Angeles, April 14–16, 1986.
- “A Simulation Study of the Transportation Systems on the Space Station,” TIMS/ORSA Joint National Meeting, Los Angeles, April 14–16, 1986.
- “Applications of Simulation Models in Manufacturing,” University of Oklahoma, Computer Integrated Manufacturing Conference, March 10, 1986.
- “Optimal Burn-in and Replacement Strategies,” Third Annual Industrial Engineering Symposium, The University of Oklahoma, May 3, 1985.
- “Reliability Modeling: A Simulation Approach,” TIMS/ORSA Joint National Meeting, Boston, MA, April 29–May 1, 1985.
- “Microcomputer Applications in Education,” 1985 Southwest Computer Conference, Oklahoma City, OK, April 9–11, 1985.
- “The General Lifetime Model Software,” ASEE Midwest Section 20th Annual Meeting, Columbia, Missouri, March 20–22, 1985.
- “A General Model for Lifetimes,” Third TIMS/ORSA Special Interest Conference on Applied Probability, Williamsburg, Virginia, January 7–9, 1985.

FELLOWSHIPS, RESEARCH GRANTS AND CONTRACTS

- “Computational Probability,” {it Quality Enhancement Plan} (QEP) associated with the Mellin Initiative, \$7700, 2008–2009.
- “Effective Transitions Through Academe to Industry for Computer Scientists and Mathematicians” (with R. Prosl, B. Noonan), National Science Foundation, \$398,748, 2002–2008.
- College of William and Mary “Algorithms for Operations on Random Variables on a Computer Algebra System,” Summer Research Grant, \$6000, 2001.
- Colonial Williamsburg Foundation, “Traveling Salesman Problem with Routing Constraints,” \$13,560, 1999 – 2009.
- “Scientific Computing Research Environments for the Mathematical Sciences” (with R.M. Lewis, M.J. Trosset, and R.M. Mathias), National Science Foundation, \$39,999, 2002–2005.
- National Science Foundation, “Educational Innovation: Undergraduate Modeling, Simulation and Analysis” (with R. Simha, S. Park, S. Zhang, R. Hanny), \$314,943, 1997 – 2002.
- Virginia Space Grant Consortium, “Reliability Analysis of NASA Data” (with P. Braxton) \$10,000, 1997.
- Price-Trac, Inc., “Mathematical Models for Promotion Analysis: Literature Review and Preliminary Analysis,” \$6892, 1996.
- College of William and Mary, “C++,” May Seminar, \$800, 1996.
- College of William and Mary, “Classroom Technology Development,” May Seminar, \$800, 1995.
- College of William and Mary, “Relationships Between Univariate Probability Distributions,” Summer Research Grant, \$5600, 1994.
- College of William and Mary, “Computing in the Mathematics Department,” May Seminar, \$800, 1993.
- Oklahoma Center for the Advancement of Science and Technology, “Center for Integrated Design and Technology,” \$300,000 (part of a center based at Oklahoma State University), 1990 – 1992.
- The University of Oklahoma Research Associates, “Computing Equipment for the Operations Research Laboratory” (with P.S. Pulat), \$11,234, 1990.
- Tinker Air Force Base, “Expert Systems and Simulation Studies of Production Facilities,” (with A.B. Badiru, B.L. Foote and R. Daniels) \$54,541, 1990.
- Kelly Air Force Base, “Simulation Training in SLAM II,” \$38,000, 1990.
- McDonnell-Douglas Corporation, “Analysis of Current Production Planning at McDonnell Douglas” (with B. Foote), \$66,967, 1989 – 1990.
- University of Oklahoma Provost’s Office, “Simulation Study of the University Admission Process,” \$3300, 1989.
- McDonnell–Douglas Corporation, “Aircraft Failure Analysis,” \$6700, 1989.
- Biomedical Research Support Grant, National Institutes of Health, “Variate Generation of Lifetimes for Biomedical Monte Carlo Simulation Studies,” \$6025, 1988 – 1989.
- University of Oklahoma Faculty Development Award, “Simulation Animation Workshop and Software Support,” \$1685, 1988.
- University of Oklahoma Research Council, “Simulation Models for Space Station Transportation Systems,” \$4000, 1987.
- Air Force Institute of Technology, Reliability Engineering Design Workshop, 1987.
- University of Oklahoma Research Council, “A Simulation Package for Reliability Models,” \$5000, 1986.
- Tinker Air Force Base, “Capacity Planning Model and Mechanized Material Handling System Routing” (with A. Ravindran, A. Badiru, and B. Foote), \$108,000, 1985.
- NASA/ASEE, Research Fellow, NASA/Langley Research Center, \$6500, 1985.
- University of Oklahoma Research Council, “Burn-in of Manufactured Products,” \$1350, 1985.
- David Ross Grant, Purdue Research Foundation, “Stochastic Lifetimes: A General Model,” summer support, 1983.

PROFESSIONAL DEVELOPMENT

- Santa Fe, New Mexico, Workshop on Benford's Law, December 17–18, 2007.
- Washington, DC, 2007 Winter Simulation Conference, December 8–11, 2007.
- Seattle, Washington, INFORMS Annual Meeting, November 4–7, 2007.
- Norfolk, VA, 2007 Virginia Modeling and Simulation Center (VMASC) Capstone Conference, Old Dominion University, April 19, 2007.
- Monterey, California, 2006 Winter Simulation Conference, December 3–6, 2006.
- Columbus, Ohio, Fall Technical Conference, October 12–13, 2006.
- Portsmouth, Virginia, 11th AIAA / ISSMO Multidisciplinary Analysis and Optimization Conference, September 6–8, 2006.
- Orlando, 2005 Winter Simulation Conference, December 4–7, 2005.
- San Francisco, INFORMS National Meeting, November 13–16, 2005.
- West Point, New York, CDAS Statistics Conference, United States Military Academy, October 27, 2005.
- Washington, DC, 2004 Winter Simulation Conference, December 5–8, 2004.
- Los Angeles, 2004 Annual Reliability and Maintainability Symposium, January 26–29, 2004.
- New Orleans, 2003 Winter Simulation Conference, December 7–10, 2003.
- Columbia, South Carolina, International Conference on Reliability and Survival Analysis (ICRSA), May 21–24, 2003.
- Tampa, 2003 Annual Reliability and Maintainability Symposium, January 27–30, 2003.
- Hampton, Virginia, EMIST (Effective Mathematics Instruction using Symbolic-computation Technology) Workshop December 18, 2002.
- San Diego, 2002 Winter Simulation Conference, December 8–11, 2002.
- Virginia Beach, SUCCEED Workshop on Effective Teaching and Learning, January 8, 2002.
- Arlington, Virginia, 2001 Winter Simulation Conference, December 9–12, 2001.
- Williamsburg, Virginia, TRADOC Technology Seminar hosted by the United States Army Training and Doctrine Command Deputy Chief of Staff for Intelligence, November 14, 2001.
- Philadelphia, 2001 S-Plus User Conference, October 18–19, 2001.
- Dallas, Industrial Engineering Research Conference, May 20–23, 2001.
- Orlando, 2000 Winter Simulation Conference, December 10–13, 2000.
- Indianapolis, Joint Statistical Meetings, August 13–17, 2000.
- Williamsburg, Virginia, Southeast Section of the American Statistical Association Regional Conference, June 5–8, 2000.
- Phoenix, 1999 Winter Simulation Conference, December 5–8, 1999.
- Washington, DC, 14th Annual Mathematical Sciences Department Chairs Colloquium, Board on Mathematical Sciences, The National Research Council, November 12–13, 1999.
- Cincinnati, INFORMS National Meeting, May 2–5, 1999.
- Washington, DC, 1998 Winter Simulation Conference, December 13–16, 1998.
- Seattle, INFORMS National Meeting, October 25–28, 1998.
- Atlanta, 1997 Winter Simulation Conference, December 7–10, 1997.
- Dallas, INFORMS National Meeting, October 26–29, 1997.
- Framingham, Massachusetts, STATS workshop, June 22–29, 1997.
- Philadelphia, 1997 Annual Reliability and Maintainability Symposium, January 13–16, 1997.
- Coronado, California, Winter Simulation Conference, December 8–11, 1996.
- Chicago, Joint Statistical Meetings, August 4–8, 1996.
- Washington, DC, INFORMS National Meeting, May 5–8, 1996.

PROFESSIONAL DEVELOPMENT (continued)

- Las Vegas, 1996 Annual Reliability and Maintainability Symposium, January 22–25, 1996.
- Arlington, Virginia, Winter Simulation Conference, December 3–6, 1995.
- Williamsburg, Virginia, 11th Annual EPA Conference on Statistics, February 27–March 2, 1995.
- Washington, DC, 1995 Annual Reliability and Maintainability Symposium, January 16–19, 1995.
- Orlando, Winter Simulation Conference, December 11–14, 1994.
- Boston, International Research Conference on Lifetime Data Models in Reliability and Survival Analysis, June 15–17, 1994.
- Atlanta, Industrial Engineering Research Conference, May 18–19, 1994.
- Nashville, ACM Sigmetrics Conference on Measurement and Modeling of Computer Systems, May 16–20, 1994.
- Anaheim, 1994 Annual Reliability and Maintainability Symposium, January 24–27, 1994.
- Chicago, TIMS/ORSA Joint National Meeting, May 16–19, 1993.
- Atlanta, 1993 Annual Reliability and Maintainability Symposium, January 25–28, 1993.
- Washington, DC, International Program Committee, IASTED International Conference on Reliability, Quality Control and Risk Assessment, November 4–8, 1992.
- Las Vegas, 1992 Annual Reliability and Maintainability Symposium, January 20–23, 1992.
- Columbia, Missouri, Fourth International Research Conference on Reliability, June 19–22, 1991.
- Nashville, TIMS/ORSA Joint National Meeting, May 12–15, 1991.
- Orlando, 1991 Reliability and Maintainability Symposium, January 28–31, 1991.
- Los Angeles, 1990 Reliability and Maintainability Symposium, January 22–25, 1990.
- Vancouver, BC, CORS/TIMS/ORSA Joint National Meeting, May 8–10, 1989.
- Atlanta, GA, 1989 Reliability and Maintainability Symposium, January 23–26, 1989.
- Washington, DC, ORSA/TIMS Joint National Meeting, April 25–27, 1988.
- Norman, OK, ASEE Midwest Section Meeting, March 31–April 1, 1988.
- St. Louis, ORSA/TIMS Joint National Meeting, October 25–28, 1987.
- Long Beach, SAE Aerospace Technology Conference, October 5–8, 1987.
- San Francisco, Joint Statistical Meetings, August 17–20, 1987.
- Chicago, Joint Statistical Meetings, August 18–21, 1986.
- Columbia, Missouri, International Research Conference on Reliability and Quality, June 9–11, 1986.
- Norman, Oklahoma, Industrial Engineering Symposium, May 2, 1986.
- Edmond, Oklahoma, Central State Applied Mathematics Conference, April 18–19, 1986.
- Los Angeles, TIMS/ORSA Joint National Meeting, April 14–16, 1986.
- Norman, Oklahoma, Computer Integrated Manufacturing Conference, March 10, 1986.
- Luray, Virginia, Air Force Office of Scientific Research Reliability Workshop, May 29–31, 1985.
- Norman, Oklahoma, Industrial Engineering Symposium, May 3, 1985.
- Boston, TIMS/ORSA Joint National Meeting, April 29–May 1, 1985.
- Columbia, Missouri, ASEE Midwest Section Meeting, March 20–22, 1985.
- Williamsburg, TIMS/ORSA Special Interest Conference on Applied Probability, January 7–9, 1985.
- Dallas, ORSA/TIMS Joint National Meeting, November 26–28, 1984.
- Philadelphia, ASA Short Course on Survival Analysis (D. R. Cox and D. Oakes), August 11–12, 1984.
- Washington, DC, Winter Simulation Conference, December 12–14, 1983.
- Chicago, ORSA/TIMS Joint National Meeting, April 25–27, 1983.

DATA ON COURSES TAUGHT 1984–present (M or CS prefix for William & Mary course)

Course	Title	Semester	Enrollment
M 111	Calculus I	Fall 1993	32
IE 2011	Introduction to Industrial Engr.	Spring 1986	10
ENG 3293	Applied Engineering Statistics	Fall 1984	110
		Fall 1985	57
		Spring 1987	87
		Fall 1987	52
		Fall 1988	41
		Fall 1989	50
		Fall 1990	58
		Spring 1992	67
M 308	Applied Statistics	Fall 2002	29
M 323	Operations Research I	Fall 2005	18
M 401/501	Probability and Statistics I	Fall 1995	19
		Spring 2001	20
		Fall 2004	20
M 410/580	Mathematical Statistics	Fall 1994	9
		Fall 1996	13
		Fall 1997	12
M 424/524	Operations Research II	Spring 2008	8
M 452/552	Probability and Statistics II	Spring 1993	16
		Spring 1994	15
		Spring 1995	20
		Spring 1996	21
		Spring 1997	12
		Spring 1998	14
		Spring 2003	10
		Spring 2004	16
Spring 2005	22		
IE 4393	Senior Design	every Spring 1985–1992	2-4 per semester
IE 5343	Reliability in Engineering Design	Fall 1986	4
		Fall 1987	8
		Spring 1988 (MPI)	13
		Spring 1988	9
		Spring 1989	7
		Spring 1990	5
		Spring 1991	10
		Fall 1992	9

DATA ON COURSES TAUGHT 1984–present (continued)

Course	Title	Semester	Enrollment
IE 5573	Stat. Analysis of Simulation Models	Spring 1986	9
		Spring 1987	10
		Spring 1988	12
		Spring 1989	12
		Spring 1990	7
		Spring 1992	9
IE 5673	Simulation of Industrial Systems	Fall 1984	34
		Fall 1985 (AT&T)	13
		Fall 1985 (OU)	39
		Fall 1986	21
		Fall 1987	20
		Fall 1988	34
		Fall 1989	28
		Fall 1990	21
		Fall 1992	24
IE 5970	Quality Control & Reliability	Spring 1985	39
CS 698	Simulation (also M 671 & CS 680)	Fall 1991	3
		Fall 1993	5
		Fall 1994	6
		Fall 1995	11
		Fall 1996	6
		Fall 1997	8
		Fall 1999	5
		Fall 2000	4
		Fall 2001	6
		Fall 2002	7
		Fall 2003	7
		Fall 2004	6
		Fall 2005	7
		Fall 2006	7
Fall 2007	12		
Fall 2008	8		
M 673	Reliability (also CS 668)	Spring 1993	9
		Spring 1994	3
		Spring 1995	6
		Spring 1996	6
		Spring 1997	5
		Spring 1998	9
		Spring 2000	8
		Spring 2002	10
		Spring 2004	8
		Fall 2006	17

DATA ON COURSES TAUGHT 1984–present (continued)

Course	Title	Semester	Enrollment
CS 678	Stat. Analysis of Simulation Models	Fall 2003	16
		Spring 2005	6
		Summer 2006	8
		Spring 2008	9
CS 688	Stat. Topics in Operations Research	Summer 2007	4
CS 688	Stat. Computational Probability	Fall 2007	16

UNIVERSITY OF OKLAHOMA SERVICE (1984–1992)

Committee	Level	From	To
Undergraduate Committee	School	8/84	8/85
Operations Research Area Committee (Chair 8/87–12/90)	School	8/84	12/92
Ad Hoc Security Committee	School	1/85	5/85
Graduate Committee	School	8/85	8/87
Committee A	School	8/85	8/87
Parking Violations Appeals Committee	University	9/85	8/86
Engineering 3293 Committee	College	12/85	12/92
Faculty Search Committee	School	8/86	8/87
Ad Hoc Academic Review Committee	School	8/87	12/87
Undergraduate Committee	School	8/87	12/90
Undergraduate Programs Coordinating Committee	College	8/87	12/90
Director Search Committee	School	8/88	4/89
Engineering Convocation Committee	College	8/89	8/90
Faculty Search Committee (Chair)	School	9/89	12/90
Centennial Committee	College	1/90	12/90
Engineering Core Curriculum Task Force	College	1/92	12/92
Faculty Search Committee (Chair)	School	1/92	12/92

Served as the Faculty Adviser for the student chapter of ORSA, the Operations Research Society of America, from its founding in 1985 through 1992. Also served as the Sponsor of the Pan American Club in 1986. Served as a graduate adviser from 1984 through 1986 and as an undergraduate adviser from 1986 through 1990. On sabbatical leave at the College of William and Mary during 1991. Joined the College of William and Mary Mathematics Department in 1992. Served on dozens of dissertation and thesis committees in Computer Science, Industrial Engineering, Electrical Engineering, and Management since 1984.

WILLIAM AND MARY SERVICE (1992–present)

Committee	Level	From	To
Graduate Studies Committee (multiple terms)	Department	1/93	present
Computer Committee (multiple terms)	Department	8/93	present
Space Allocation Committee	Department	11/93	9/98
Personnel Committee (multiple terms)	Department	9/94	present
Computational Science Cluster Committee	Department	3/95	6/96
Applied Science Admissions Committee	Department	11/95	9/97
Faculty search committee (multiple terms)	Department	3/96	5/08
Ad hoc Calculus Committee	Department	5/96	8/96
Computational Sciences Executive Committee	University	5/97	5/00
Chair, Mathematics Department	Department	7/99	6/02
Actuarial Science Coordinator (multiple terms)	Department	8/99	present
Admissions Liason, Goldwater Adviser	University	8/00	12/00
Merit Evaluation Committee (multiple terms)	Department	7/99	5/08
Education Policy Committee	Arts & Sciences	5/03	5/05

Served on Fall 1993 and 1994 registration. Served as an adviser on the research experience for undergraduates, 1993. PhD committees: Computer Science (1993), Applied Science (1996). Undergraduate honors theses: Chemistry (1994, 1995), Computer Science (1995), Mathematics (1994, 1996). Advised an undergraduate mathematics honors thesis during 1995–1996. Served on committees for three students taking qualifying exams during 1995. Served as graduate student orientation coordinator, 1993–1996. Advised first William and Mary undergraduate COMAP contest team in 1994. Advised other teams in 1995, 1996, 1997, and 1998 (the 1996 and 1997 teams were awarded "honorable mention", and the 1998 team was awarded "meritorious"). On sabbatical leave at Purdue University during 1998–1999. On sabbatical leave spring 2006 and spring 2007.

PROFESSIONAL SERVICE

Secretary, Purdue chapter of Omega Rho (Operations Research Honor Society), 1982–1983.
 Institute of Industrial Engineers, V.P. Membership, Region IX, Chapter 57, 1985–1986.
 Program Chair, Industrial Engineering Symposium, University of Oklahoma, 1987–1989.
 Administrative Committee Member, IEEE Reliability Society, 1988–1990.
 Review Board Member, *Journal of Quality Technology*, 1989–1991.
 International Program Committee, IASTED International Conference on Reliability, Quality Control and Risk Assessment, November 4–8, 1992, Washington, DC.
 Secretary, ACORD (Academic Council of Operation Research Department Heads), 4/96 – 4/97, Vice-President, 4/97 – 4/98, President, 4/98 – 4/99.
 External reviewer for a promotion case to (a) full professor, 1996, (b) associate professor, 2001, (c) full professor, 2003, (d) full professor, 2003, (e) associate professor, 2006.
 Introductory Tutorials Track Co-ordinator, Winter Simulation Conference, 1997, 2007.
 Virginia Modeling and Simulation Center Advisory Board Member, 1998–present.
 NSF panel for Operations Research proposals, Washington, DC, April 25, 2006.
 Referee or reviewer for: *The American Statistician*, *Applied Stochastic Models in Business and Industry*, *Australian Meteorological Magazine*, Birkhauser, *Communications in Statistics: Simulation and Computation*, *Computational Statistics and Data Analysis*, *Computers and Industrial Engineering*, *Computers and Operations Research*, *European Journal of Operations Research*, *Fuzzy Sets and Systems*, Hemisphere Publishing Corporation, *IEEE Transactions on Computers*, *IEEE Transactions on Reliability*, *IIE Transactions*, *Industrial Engineering Research Conference*, *INFORMS Journal on Computing*, *Interfaces*, *International Journal of Mathematics and Mathematical Sciences*, *International Journal of Operations and Quantitative Management*, *Journal of the American Statistical Association*, *Journal of the College of Science of King Saud University*, *Journal of Computational and Graphical Statistics*, *Journal of Educational and Behavioral Statistics*, *Journal of Quality Technology*, *Location Science*, *Management Science*, Marcel Dekker, Inc., *Naval Research Logistics*, NSF Small Business Innovation Research Program, *Operations Research*, *Operations Research Letters*, *OPSEARCH*, Prentice–Hall, Inc., *Quality & Reliability Engineering International*, SIAM, *Simulation*, Springer–Verlag, *Statistics and Probability Letters*, *Technometrics*, Van Nostrand Reinhold, John Wiley and Sons, Inc., and The Winter Simulation Conference.

THESES AND DISSERTATIONS SUPERVISED

Student's Name	Degree	Date	Thesis/Dissertation Title
Margarita Beneke	MS	1986	Spectral Analysis in Quality Control: A Control Chart Based on the Periodogram
Steve Rogers	MS	1987	The Integration of Logical and Factual Reliability Estimation Models Through Credibility Theory with Applications to Orbital Launch Vehicles
Viroy Koh	MS	1987	Optimal Burn-in Test Procedure: An Approach Based on Lifetime Data
Karen Zunkel	MS	1989	A Comparison of the Accelerated Life and Proportional Hazards Models in Reliability
Craig Whitbeck	MS	1989	Component vs. System Burn-in in Reliability Engineering
Mohamed Abdel-Aziz	Ph.D	1990	Multi-Criteria Optimization Applied to Multistate Repairable Components
Li-Hsing Shih	Ph.D	1991	The Nonhomogeneous Poisson Process with Covariate Effects
Mike Oltmanns	MS	1992	Development and Testing of a New Confidence Interval Procedure for Simulation Output Analysis
Andy Glen	Ph.D	1998	A Probability Programming Language: Development and Applications
Diane Evans	Ph.D	2001	Algorithms for Operations on Probability Distributions in a Computer Algebra System