

CURRICULUM VITAE

PETER W. GLYNN

Professor

Department of Management Science & Engineering

Stanford University
Stanford, CA 94305-4026

EDUCATION

- **Ph.D.** in *Operations Research*,
Stanford University, Stanford, CA, 1982.

Title: Simulation Output Analysis for General State Space Markov Chains

- **B.S.** with Honors in *Mathematics*
Carleton University, Ottawa, Ontario, Canada, 1978.

Honors Thesis Title: Application of Diffusion Approximation to a Two-Customer -Type Single Server Queue

PROFESSIONAL EXPERIENCE

- *Chair*, Department of Management Science and Engineering, Stanford University, 2011-present
- *Director*, Institute for Computational and Mathematical Engineering, Stanford University, 2006 – 2010
- *Concurrent Professor*, Nanjing University, 2012-
- *Adjunct Research Professor*, Department of Mathematics and Statistics, Carleton University, 2012-2017
- *Member*, Institute for Computational and Mathematical Engineering, Stanford University, 2004-

- *Professor (by Courtesy)*, Department of Electrical Engineering, Stanford University, 2008-
- *Professor*, Department of Management Science and Engineering, Stanford University, January 2000 to present
- *Deputy Chair*, Department of Management Science and Engineering, Stanford University, January 2000 to August 2001, September 2002 to August 2005
- *Professor*, Department of Engineering-Economic Systems and Operations Research, Stanford University, Autumn 1996 – Autumn 1999
- *Professor*, Department of Operations Research, Stanford University, Autumn 1994 – Summer 1996.
- *Visiting Professor*, Department of Statistics, Rice University, October 1996 – December 1996.
- *Associate Professor*, Department of Operations Research, Stanford University, Autumn 1987 – Summer 1994
- *Visiting Associate Professor*, Department of Mathematics and Statistics, Carleton University, September 1989 – December 1989
- *Assistant Professor*, University of Wisconsin-Madison (Joint appointment between Industrial Engineering and Mathematics Research Center [courtesy appointments in Computer Science and Mathematics]) Summer 1982 – Summer 1987

HONORS, AWARDS AND DISTINCTIONS

- *Member*, National Academy of Engineering (elected 2012)
- *2010 John von Neumann Theory Prize*, INFORMS [with Soren Asmussen]
- *Winner of Best Publication Award* (for period 2007-2009), INFORMS Applied Probability Society, 2009 [with Jose Blanchet and Jing-chen Liu]
- *Winner of Outstanding Simulation Publication Award* (for period 2006-2008) INFORMS Simulation Society, for “Stochastic Simulation: Algorithms and Analysis” [with Soren Asmussen]
- *Fellow*, INFORMS, 2007 – present
- Two of top ten most influential papers published in 1st 40 years of Winter Simulation Conference (1967-2007).
- One of 50 most influential papers published in *Management Science*, 1954-2004

- *Fellow*, Institute of Mathematical Statistics (IMS), 1998 - present
- *Thomas W. Ford Professor of Engineering*, 1996 – present
- *IMS Medallion Lecturer*, 1995
- *Thomas W. Ford Faculty Scholar Chair*, 1993 – 1996
- *Winner of Outstanding Simulation Publication Award*, INFORMS Simulation Society, for “Discrete-time Conversion for Simulating Finite-Horizon Markov Processes” [with B.L. Fox], 1993.
- *Postgraduate Scholarship*, Natural Sciences and Engineering Research Council of Canada, 1978 – 1982
- *Senate Medal for Academic Achievement*, Carleton University, 1978
- *Lester B. Pearson Scholarship*, Carleton University, 1977 – 1978
- *Henry M. Tory Scholarship*, Carleton University, 1973 – 1977

EDITORIAL BOARDS, PROFESSIONAL AFFILIATIONS AND SERVICE

Editorial Boards

- Member of Editorial Board, *Applied Stochastic Models and Data Analysis*, 1985-1991
- Member of Editorial Board, *Stochastic Models*, 1987 – 1998
- Associate Editor, *Management Science*, 1988 – 1997
- Associate Editor, *Journal of Discrete Event Dynamic Systems*, 1990 – 1994
- Associate Editor, *The Annals of Applied Probability*, 1994 – present
- Editor, *Springer-Verlag Series in Operations Research*, 1995 – 2004
- Guest Editor, *Discrete Event Dynamic Systems: Theory and Applications*, 1996, special issue focused on generalized semi-Markov processes
- Associate Editor, *Mathematics of Operations Research*, 1996 –2001, 2005-2009.
- Co-Editor, *Journal of Computational Finance*, 1997 –2001
- Area Editor, *Mathematics of Operations Research*, 2002 – 2005

- Advisory Board, *Queueing Systems: Theory and Applications*, 2009-
- Associate Editor, *Journal of Applied Probability* and *Advances in Applied Probability*, 2005- present
- Founding Editor-in-Chief, *Stochastic Systems*, 2009- present

Professional Affiliations

- The Institute for Operations Research and the Management Sciences (INFORMS)
- Institute of Mathematical Statistics (IMS)

Professional Service

- *Member*, Academic Advisory Committee, Department of Industrial Engineering and Logistics Management, Hong Kong University of Science and Technology, 2012-
- *Member*, Board of Directors, Laboratory for Research in Statistics and Probability, Carleton University, 2012-
- *Member*, Mitacs Speakers Advisory Group, 2012-
- *Member*, Scientific Advisory Board, Banff International Research Station, 2011-
- *Member*, Committee on Special Lectures, IMS, 2011-
- *Member*, Program Committee, 8th World Congress in Probability and Statistics, Istanbul, July 2012
- *Principal Co-Organizer*, Thematic Programme in *Stochastic Processes in the Communications Sciences*, Isaac Newton Institute, University of Cambridge, January 2010 to July 2010
- *Member*, Best Publication Award Committee, INFORMS Simulation Society, 2008-2011
- *Member*, Steering Committee, Rare Event Simulation Conference, 2010-
- *Program Committee*, Sigmetrics, 2010 and 2011
- *Program Co-Chair*, Efficient Monte Carlo: From Variance Reduction to Combinatorial Optimization. Sønderborg, Denmark, 2008.
- *Member*, Technical Program Committee, Valuetools Conference, Pisa, Italy, 2009

- *General Program Co-Chair*, Valuetools Conference, Nantes, France, 2008
- *Member*, INFORMS von Neumann Prize Committee, 2006-2008
- *Co-organizer* of 2005 INFORMS Applied Probability Conference, Ottawa, Canada
- *Chair*, INFORMS Applied Probability Society, 2004-2006
- *Council Member*, INFORMS Applied Probability Society, 2002-2010
- *Member*, International Scientific Advisory Board, Mathematics of Information Technology and Complex Systems, 2006-2011
- *Chair*, Evaluation Committee, Eurandom, 2005
- *Co-organizer* of 2004 Stochastic Networks Conference, Montreal, Canada
- *Member*, Steering Committee, Centre de Recherches Mathematiques, Montreal, Canada, 2002-2005.
- *Co-organizer* of 2002 Conference on Stochastic Networks, Stanford University, June 2002.
- *Member*, Grant Selection Committee for the Statistical Sciences, Natural Sciences and Engineering Research Council of Canada, 2001-2002.
- INFORMS *Finance Committee*, 2001-2007
- INFORMS *Lanchester Prize Committee*, 1999-2000.
- *Organizing Committee*, Third International Workshop on Mathematical Methods in Stochastic Simulation and Experimental Design, St. Petersburg, Russia, 1998.
- *Co-organizer*, Special Workshop on Applications of Probability in Telecommunications, Fields Institute, Toronto, 1998.
- *Program Committee*, Conference on Monte Carlo and Quasi-Monte Carlo Methods, Claremont, CA, 1998.
- INFORMS *Committee* to review status and choose new editor of Mathematics of Operations Research, 1998.
- *Outstanding Simulation Publication Award Committee*, INFORMS College on Simulation, 1996 – 1999.

- *Member, Outstanding Publication Award / Erlang Prize Committee*, INFORMS College on Applied Probability, 1996 – 1999.
- *External Doctoral Examiner*, Carleton University, 1997.
- *Organizing Committee*, Second International Workshop on Mathematical Methods in Stochastic Simulation and Experimental Design, St. Petersburg, Russia, 1996.
- *Organizing Committee*, International Workshop on Computational and Statistical Issues for Stochastic Processes, Cremona, Italy, 1996.
- *Organizing Committee*, Computational Finance Conference, International Association of Financial Engineers, Stanford University, 1996.
- *Organizer* of Workshop on Simulation and Monte Carlo Methods, sponsored by NSERC and Telecommunications Research Institute of Ontario, Ottawa, Canada, 1995.
- *International Science Foundation Evaluation Panel for the Mathematical Sciences*, 1993.
- *Transportation Research Board Task Force on Transportation Modeling Research Needs*, 1993 – 1995.
- *Principal Organizer* of first SIAM Meeting on Simulation and Monte Carlo Methods (held in San Francisco), 1993.
- *Member of Program Committee*, Conference on Applied Probability in Engineering, Computer, and Communication Sciences (held in Paris, France), 1993.
- *External Doctoral Examiner*, University of Waterloo, 1992.
- *Member of Study Planning Group*, National Research Council Doctoral and Postdoctoral Mathematics Study Planning Group, 1990 – 1991.
- *NSF Evaluation Panel* for Research Initiation Awards, 1990, 1999 and 2000.
- *External Doctoral Examiner*, Carleton University, 1990.
- *George Nicholson Prize Committee*, 1989.
- *Organizing Committee*, 18th Conference on Stochastic Processes and their Applications (held in Madison, Wisconsin), 1989.
- *NSF Panel* on Discrete-Event Dynamical Systems, 1987.
- *NSF Panel* on Operations Research in the Next Decade, 1986.

ACADEMIC COMMITTEES AND DOCTORAL SUPERVISION

Stanford University

- Member, Faculty Senate, 2006 – 2007
- Chair, Management Science and Engineering Finance Committee, 2003-2011
- Member, Committee on Academic Achievement and Promotion, 1998-2001.
- Member, Management Science and Engineering Space Committee, 2000-2001.
- Chair, Management Science and Engineering Transition Committee, 2000-2001.
- Member, School of Engineering Committee on Computational Mathematics and Engineering, 2000-2001.
- Member, Management Science and Engineering Graduate Program Committee, 2000-2001.
- Member, Stanford Judicial Council, 1993 – 1998.
- Member, School of Engineering Task Force on Technology Management, 1992.
- Chair, Department Admissions Committee, 1990 – 1992.
- Member, Steering Committee, Stanford Integrated Manufacturing Association, 1990 – 1996.
- Member, Undergraduate Council of the School of Engineering, 1989 – 1992.

Doctoral Supervision

DAMERDJI, Halim, *Topics in Discrete-Event Stochastic Systems*, August 1988.

CALVIN, James M., *Stochastic Optimization Algorithms and Moment Formulas for Markov Chains*, September 1989.

*SHAHABUDDIN, Perwez, *Simulation and Analysis of Highly Reliable Systems*, June 1990.

ANDRADOTTIR, Sigrun, *Stochastic Optimization with Applications to Discrete Event Systems*, August 1990.

*NAKAYAMA, Marvin, *Simulation of Highly Reliable Markovian and Non-Markovian Systems*, January 1991.

MUÑOZ, David, *Cancellation Methods in the Analysis of Simulation Output*, February 1991.

*CHAN, Nathaniel, *Optimal Hydraulic Aquifer Management with Reliability Constraints*, June 1992.

ERDMANN, Eva Diane, *Complexity Measures for Testing Binary Keystreams*, June 1993.

KOLLMAN, Craig (Statistics), *Rare Event Simulation in Radiation Transport*, October 1993.

JUNEJA, Sandeep, *Efficient Rare Event Simulation of Stochastic Systems*, December 1993.

LENNON, Tava, *Response-Time Approximations for Multi-Server Polling Models, with Manufacturing Applications*, August 1994.

LOH, Wing Wah, *Methods of Control Variates for Discrete Event Simulation*, December 1994.

YANG, Tzu-Hui, *Efficient Simulation Techniques with Application to Performance Evaluation of ATM Switches*, June 1995.

SCHWERER, Elizabeth, *A Linear Programming Approach to the Steady-State Analysis of Markov Processes*, May 1996.

BRADLEY, James Robert, *Managing Manufacturing Assets and Subcontracting Policies*, March 1997.

HENDERSON, Shane, *Variance Reduction via an Approximating Markov Process*, May 1997.

HSIEH, Ming-hua, *Adaptive Importance Sampling for Rare Event Simulation of Queueing Networks*, January 1998.

WONG, Eugene, *An Empirically-Based Coupling Algorithm for Transient Simulation*, August 1998.

LEE, Shing-Hoi, *Monte Carlo Computation of Conditional Expectation Quantiles*, August 1998.

ROMINE, Brad, *Real Options in Energy Markets: Analysis and Computation*, March 2000.

DESAI, Paritosh, *Adaptive Monte Carlo Methods for Solving Eigenvalue Problems*, April 2001.

SZECHTMAN, Roberto, *Efficient Monte Carlo Simulation in the Presence of Constraints*, September 2001.

WARD, Amy, *Queues with Reneging*, September 2001.

ZEEVI, Assaf, *Characterization and Estimation of Rare Events via Extreme Values*, September 2001.

ARAMAN, Victor, *Maximum of Perturbed Random Walk: Limit Theorems and Applications*, 2002

BLANCHET, Jose, *Limit Theorems and Approximations with Applications to Insurance Risk and Queueing Theory*, 2004

HOLIDAY, Timothy, *Cross-layer Design of Wireless Systems*, 2004

SALZMAN, Peter, *Statistical Models for the Natural History of Breast Cancer*, 2005

CHIA, Yen Lin, *Simulation-based Optimization and Applications in Biomedical Modeling*, 2005

AWAD, Hernan, *Clumping of Losses and Long Delays in a Queue: Analysis and Simulation*, 2005

SUN, Yuqing, *Stochastic Models for Warranty Cost Analysis and Online Purchase Prediction*, 2005

OLVERA-CRAVIOTO, Mariana. *The Single-Server Queue with Heavy Tails*, 2006

SHANBHAG, Uday. *Decomposition and Sampling Methods for Stochastic Equilibrium Problems*. 2006

LIM, Eunji, *Simulation-based Response Surface Computation in the Presence of Shape Constraints*, 2008

WU, Wei, *Simulation-based Optimization in the Presence of Convexity*, 2009

ZHANG, Xiaowei, *Computing Rare-event Probabilities for Affine Models and General State Space Markov Processes*. 2011.

WEST, Nick. *Filtering and Control of Flow in a Model Scramjet Engine* (co-advised with George Papanicolaou). 2012.

*Nathan Chan was awarded the Outstanding Research Paper of 1994 for the Water Resources Planning and Management Division, ASCE.

*Perwez Shahabuddin won the Nicholson Prize, and Marvin Nakayama received a Nicholson Prize Honorable Mention. This prize, for the best student paper of the year, is awarded by INFORMS. Shahabuddin's dissertation also won the Outstanding Simulation Publication Award of the INFORMS College on Simulation in 1996.

RESEARCH, PUBLICATIONS, TECHNICAL PROJECTS, INVITED LECTURES

Publications

Book Chapters

1. "Recursive Moment Formulas for the Regenerative Method of Simulation" [with D.L. Iglehart]. *Semi-Markov Models*, [J. Janssen, ed.]. Plenum Press, New York, 99-110 (1986).
2. "Smoothed Limit Theorems for Equilibrium Processes" [with D.L. Iglehart]. *Probability, Statistics, and Mathematics: Papers in Honor of Samuel Karlin*, [T.W. Anderson, K.B.T. Athreya, D.L. Iglehart, eds.]. Academic Press, Boston, 89-102 (1989).
3. "Diffusion Approximations" Chapter No. 4. *Stochastic Models: Handbooks of OR & MS, Vol. 2* [D. Heyman and M. Sobel, eds.]. Elsevier Science Publishers (1990). Also translated into Japanese.
4. "A GSMP Formalism for Discrete Event Systems". *Discrete Event Dynamic Systems* [Yu-Chi Ho, ed.]. IEEE Press, Piscataway, NJ (1992).
5. "Large Deviations for the Infinite Server Queue in Heavy Traffic". *Mathematics and its Applications* [F. P. Kelly, R. J. Williams, eds.] Vol. 71, 387-395 (1995).
6. "Two Approaches to the Initial Transient Problem". *Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing* [H. Niederreiter, P. Shuie, eds.] *Lecture Notes in Statistics*, Vol. 106, Springer-Verlag, New York, 49-57 (1995).
7. "Nonparametric Estimation of Tail Probabilities for the Single-Server Queue" [with M. Torres]. *Stochastic Networks: Stability and Rare Events* [P. Glasserman, K. Sigman, D.D. Yao, eds.] Springer-Verlag, 109-138 (1996).
8. "Parametric Estimation of Tail Probabilities for the Single-Server Queue" [with M. Torres]. *Frontiers in Queueing: Models and Applications in Science and Engineering* [J. H. Dshalalow, ed.] CRC Press, New York, 449-462 (1997).
9. "Stochastic Optimization via Grid Search. Mathematics of Stochastic Manufacturing Systems". *Lectures in Applied Mathematics*, Vol. 33, American Mathematical Society [G.G. Yin, Q. Zhang, eds.], Providence, Rhode Island, 89 – 100 (1997).
10. "Strong Approximations in Queueing Theory". *Asymptotic Methods in Probability and Statistics* [B. Szyszkowicz, ed.] Elsevier Science, The Netherlands, 135-150 (1998).
11. "Winning the Hand of the Princess Saralinda" [with W. Whitt]. *Applied Probability and Stochastic Processes* [J.G. Shanthikumar, U. Sumita, eds.] Kluwer Academic Publishers, Boston, 231-246 (1999).
12. "Estimating Tail Probabilities in Queues via Extremal Statistics" [with A. Zeevi]. *Analysis of Communication Networks: Call Centres, Traffic, and Performance* [D. McDonald, S. Turner, eds.] Fields Institute Communications, American Mathematical Society, Rhode Island, 135-158 (2000).

13. "Some New Perspectives on the Method of Control Variates" [with R. Szechtman]. *Monte Carlo and Quasi-Monte Carlo Methods 2000*, [K.T. Fang, F.J. Hickernell, H. Niederreiter, eds.] Springer-Verlag, Berlin (2002), 27-49.
14. "Simulation Algorithms for Regenerative Processes" (chapter in "*Handbook in Operations Research and Management Science: Simulation*" (Editors: Shane Henderson and Barry Nelson, 2006), 477-500.
15. "A Stochastic Simulation Model of US Breast Cancer Mortality Trends from 1975 to 2000" (with S. Plevritis, B. Sigal, P. Salzman, and J. Rosenberg), *Journal of the National Cancer Institute Monographs* 36:86-95 (2006).
16. "Bounding Stationary Expectations of Markov Processes" (with A. Zeevi). *Markov Processes and Related Topics: A Festschrift for Thomas G. Kurtz* (S. Ethier, J. Feng, and R. Stockbridge, eds.) Institute of Mathematical Statistics (2008), 215-234.
17. "Strongly Efficient Algorithms for Light-tailed Random Walks: An Old Folk Song Sung to a Faster new Tune" (with J. Blanchet and K. Leder). *Monte Carlo and Quasi-Monte Carlo Methods 2008*, [P. L'Ecuyer and Art Owen, eds.], Springer (2009), 227-248.
18. "Robustness Properties and Confidence Interval Reliability" (with G. Rubino and B. Tuffin). *Rare Event Analysis Using Monte Carlo Methods* (G. Rubino and B. Tuffin, eds.) John Wiley (2009), 63-84.
19. "Asymptotic Validity of Batch Means Steady-State Confidence Intervals" (with E. Lim). *Festschrift in Honor of George S. Fishman* (David Goldsman and James R. Wilson, eds.), 87-104 (2009)

Books

Proceedings of NSF Workshop on Resource Planning Under Uncertainty [co-edited with G.B. Dantzig] (1990).

Stochastic Simulation: Algorithms and Analysis [with S. Asmussen] Springer (2007).

New Frontiers in Applied Probability: Festschrift in Honor of Soren Asmussen (edited with Thomas Mikosch, Tomasz Rolski). Applied Probability Trust (2011).

Articles in Refereed Journals (published and accepted)

1. "On the Markov Property of the GI/G/ ∞ Gaussian Limit". *Advances in Applied Probability*, Vol.14, 191-194 (1982).
2. "On Confidence Intervals for Cyclic Regenerative Processes". *Operations Research Letters*, Vol. 2, 66-71 (1982).

3. "Some Asymptotic Formulas for Markov Chain with Applications to Simulation". *Journal of Statistical Computation and Simulation*, Vol. 19, 97-112 (1984).
4. "On the Range of a Regenerative Sequence". *Stochastic Processes and Their Applications*, Vol. 20, 105-113 (1985).
5. "Regenerative Structure of Markov Chains Simulated via Common Random Numbers". *Operations Research Letters*, Vol. 4, 49-53 (1985).
6. "Regenerative Processes and the ϕ -Mixing Property." *TIMS Simulation Newsletter* (1985).
7. "Discrete-Time Conversion for Simulating Semi-Markov Processes" [with B. L. Fox]. *Operations Research Letters*, Vol. 5, 191-196 (1986).
8. "A Central-Limit-Version of $L = \lambda W$ " [with W. Whitt]. *Queueing Systems: Theory and Applications*, Vol. 2, 191-215 (1986).
9. "Estimation of Steady-State Central Moments by the Regenerative Method of Simulation" [with D. L. Iglehart]. *Operations Research Letters*, Vol. 5, 271-276 (1986).
10. "Sufficient Conditions for Functional Limit Theorem Versions of $L = \lambda W$ " [with W. Whitt]. *Queueing Systems*, Vol. 1, 279-287 (1986).
11. "Upper Bounds for Poisson Tail Probabilities". *Operations Research Letters*, Vol. 6, 9-14 (1987).
12. "Estimating Time Averages via Randomly-Spaced Observations" [with B. L. Fox]. *SIAM Journal of Applied Mathematics*, Vol. 47, 186-200 (1987).
13. "Limit Theorems for the Method of Replication". *Stochastic Models*. Vol. 4, 343-350 (1987).
14. "A Joint Central Limit Theorem for the Sample Mean and Regenerative Variance Estimator" [with D.L. Igelhart]. *Annals of Operations Research*, Vol. 8, 41-55 (1987).
15. "Ordinary CLT and WLLN Versions of $L = \lambda W$ " [with W. Whitt]. *Mathematics of Operations Research*, Vol. 13, 674-692 (1988).
16. "An LIL Version of $L = \lambda W$ " [with W. Whitt]. *Mathematics of Operations Research*, Vol. 13, 693-710 (1988).
17. "Computing Poisson Probabilities" [with B. L. Fox]. *Communications of the ACM* 31, 440-445 (1988).
18. "Operations Research: The Next Decade". *Operations Research*, Vol. 36, 619-637 (1988).
19. "Simulation Methods for Queues: An Overview" [with D. L. Iglehart]. *Queueing Systems: Theory and Applications*, Vol. 3, 221-256 (1988).

20. "Conditions under which a Markov Chain Converges in Finite Time" [with D. L. Iglehart]. *Probability in the Engineering and Informational Sciences*, Vol. 2, 377-382 (1988).
21. "A New Class of Strongly Consistent Estimators for Steady-State Simulations" [with D. L. Iglehart]. *Stochastic Processes and their Applications*, Vol. 28, 71-80 (1988).
22. "On the Valuation of Payoffs from a Geometric Random Walk of Oil Prices" [with A. S. Manne]. *Pacific and Asian Journal of Energy*, Vol. 2 (1), 47-48 (1988).
23. "Indirect Estimation via $L = \lambda W$ " [W. Whitt]. *Operations Research*, Vol. 37, 82-103 (1989).
24. "Extensions of the Queueing Relations $L = \lambda W$ and $H = \lambda G$ " [with W. Whitt]. *Operations Research*, Vol. 37, 634-644 (1989).
25. "The Optimal Linear Combination of Control Variates in the Presence of Bias" [with D. L. Iglehart]. *Naval Research Logistics*, Vol. 36, 683-692 (1989).
26. "Estimating Discounted Costs" [with B. L. Fox]. *Management Science*, Vol. 35, 1297-1325 (1989).
27. "Importance Sampling for Stochastic Simulation" [with D. L. Iglehart]. *Management Science* Vol. 35, 1367-1392 (1989).
28. "Replication Schemes for Limiting Expectations" [with B. L. Fox]. *Probability in the Engineering and Informational Sciences*, Vol. 3, 299-318 (1989).
29. "Parallel Processors for Planning Under Uncertainty" [with G. B. Dantzig]. *Annals of Operations Research*, Vol. 22, 1-21 (1990).
30. "Simulation Output Analysis Using Standardized Time Series" [with D. L. Iglehart]. *Mathematics of Operations Research*, Vol. 15, 1-16 (1990).
31. "Discrete-time Conversion for Simulating Finite-Horizon Markov Processes" [with B. L. Fox]. *SIAM J. Appl. Math.* Vol. 50, 1457-1473 (1990).
32. "Bias Properties of Budget Constrained Monte Carlo Simulations" [with P. Heidelberger]. *Operations Research*, Vol. 38, 801-814 (1990).
33. "Likelihood Ratio Gradient Estimation for Stochastic Systems". *Communications of the ACM*, Vol. 33, 75-84 (1990).
34. "Queues with Negative Arrivals" [with E. Gelenbe, K. Sigman]. *Journal of Applied Probability*, Vol. 28, 245-250 (1991).
35. "A New View of the Heavy-Traffic Limit Theorem for Many-Server Queues" [with W. Whitt]. *Advances in Applied Probability*, Vol. 23, 188-209 (1991).

36. "Analysis of Initial Transient Deletion for Replicated Steady-State Simulations" [P. Heidelberger]. *Operations Research Letters*, Vol. 10, 437-443 (1991).
37. "Estimating the Asymptotic Variance with Batch Means" [with W. Whitt]. *Operations Research Letters*, Vol. 10, 431-435 (1991).
38. "Analysis of Parallel, Replicated Simulations Under a Completion Time Constraint" [with P. Heidelberger]. *ACM Transactions on Modeling and Simulation*, Vol. 1, 3-23 (1991).
39. "Departures from Many Queues in Series" [with W. Whitt]. *Annals of Applied Probability*, Vol.1, 546-572 (1991).
40. "A Unified Framework for Simulating Markovian Models of Highly Dependable Systems" [with A. Goyal, P. Shahabuddin, P. Heidelberger, V.F. Nicola]. *IEEE Transactions on Computers*, Vol. 41, 36-51, (1992).
41. "Uniform Limit Theorems for Synchronous Processes with Applications to Queues" [with K. Sigman]. *Stochastic Processes and their Applications*, Vol. 40, 29-43 (1992).
42. "Analysis of Initial Transient Deletion for Parallel Steady-State Simulations" [with P. Heidelberger]. *SIAM J. Scientific Stat. Computing*, Vol. 13, 904-922 (1992).
43. "The Asymptotic Efficiency of Simulation Estimators" [with W. Whitt]. *Operations Research*, Vol. 40, 505-520 (1992).
44. "The Asymptotic Validity of Sequential Stopping Rules for Stochastic Simulations" [with W. Whitt]. *Annals of Applied Probability*, Vol. 2, 180-198 (1992).
45. "Experiments with Initial Transient Deletion for Parallel, Replicated Steady-State Simulations" [with P. Heidelberger]. *Management Science*, Vol. 38, 400-418 (1992).
46. "Pathwise Convexity and its Relation to Convergence of Time-Average Derivatives." *Management Science*, Vol. 38, 1360-1366 (1992).
47. "Stationarity Detection in the Initial Transient Problem" [with S. Asmussen, H. Thorisson]. *ACM Transactions on Modeling and Computer Simulation*, Vol. 2, 130-157 (1992).
48. "Jackknifing Under a Budget Constraint" [P. Heidelberger]. *ORSA Journal on Computing*, Vol. 4, 226-234 (1992).
49. "Estimating Customer and Time Averages [B. Melamed, W. Whitt]. *Operations Research*, Vol. 41, 400-408 (1993).
50. "Conditions for the Applicability of the Regenerative Method" [with D. L. Iglehart]. *Management Science*, Vol. 39, 1108-1111 (1993).
51. "Limit Theorems for Cumulative Processes" [with W. Whitt]. *Stochastic Processes and their Applications*, Vol. 47, 299-314 (1993).

52. "Likelihood Ratio Sensitivity Analysis for Markovian Models of Highly Dependable Systems" [with M. Nakayama, A. Goyal]. *Operations Research*, Vol. 42, 137-157 (1994).
53. "Importance Sampling for Markov Chains: Asymptotics for the Variance". *Stochastic Models*, Vol. 10, 701-717 (1994).
54. "Logarithmic Asymptotics for Steady-State Tail Probabilities in a Single-Server Queue" [W. Whitt]. *Advances in Applied Probability*, 131-156 (1994).
55. "Stochastic Optimization by Simulation: Numerical Experiments with the M/M/1 Queue in Steady-State" [with P. L'Ecuyer, N. Giroux]. *Management Science*, Vol. 40, 1245-1261 (1994).
56. "Stochastic Optimization by Simulation: Convergence Proofs for the GI/G/1 Queue in Steady-State" [with P. L'Ecuyer]. *Management Science*, Vol. 40, 1562-1578 (1994).
57. "Efficiency Improvement Techniques". *The Annals of Operations Research*, Vol. 53, 175-198 (1994).
58. "On the Existence and Estimation of Performance Measure Derivatives for Stochastic Recursions" [with P. L'Ecuyer]. 11th International Conference on Analysis and Optimization of Systems, Lecture Notes in Control and Information Sciences (Springer-Verlag), Vol. 199, 429-442 (1994).
59. "Poisson's Equation for the Recurrent M/G/1 Queue". *Advances in Applied Probability*, Vol. 26, 1044-1062 (1994)
60. "Some Topics in Regenerative Steady-State Simulation". *Acta Applicandae Mathematicae*, Vol. 34, 225-236 (1994).
61. "Large Deviations Behavior of Counting Processes and Their Inverses" [with W. Whitt]. *Queueing Systems: Theory and Application*, Vol. 17, 107-128 (1994)
62. "On the Value of Function Evaluation Location Information in Monte Carlo Simulation" [with T. J. DiCiccio]. *Management Science*, Vol. 41, 733-737 (1995)
63. "A Martingale Approach to Regenerative Simulation" [with D. L. Iglehart]. *Probability in the Engineering and Informational Sciences*, Vol. 9, 123-131 (1995)
64. "Trading Securities Using Trailing Stops" [with D. L. Iglehart]. *Management Science*, Vol. 41 (6), 1096-1106 (1995)
65. "Accelerated Regeneration for Markov Chain Simulations" [with S. Andradottir, J. M. Calvin]. *Probability in the Engineering and Informational Sciences*, Vol. 9, 497-523, (1995)
66. "Efficient Monte Carlo Simulation of Security Prices" [with D. Duffie]. *The Annals of Applied Probability*, Vol. 5 (4), 897-905 (1995)

67. "Discretization Error in Simulation of One-dimensional Reflecting Brownian Motion" [with S. Asmussen, J. Pitman]. *The Annals of Applied Probability*, Vol. 5 (4), 875-896 (1995)
68. "Likelihood Ratio Gradient Estimation for Stochastic Recursions" [with P. L'Ecuyer]. *Advances in Applied Probability*, Vol. 27, 1019-1053 (1995)
69. "Complexity of Non-Adaptive Optimization Algorithms for a Class of Diffusions" [with J. Calvin]. *Stochastic Models*, Vol. 18 (3), 343-365 (1995)
70. "Heavy-Traffic Extreme-Value Limits for Queues" [with W. Whitt]. *Operations Research Letters*, Vol. 18, 107-111 (1995)
71. "Efficient Simulation via Coupling" [with E. Wong]. *Probability in the Engineering and Informational Sciences*, Vol. 10, 165-186 (1996)
72. "A Lyapunov Bound for Solutions of Poisson's Equation" [with S. Meyn]. *The Annals of Probability*, 916-931 (1996)
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