

Curriculum Vitae

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Education

Diploma of Electrical Engineering (1982) National Technical University of Athens
M.Sc. Applied Mathematics (1983) Harvard University
Ph.D. Applied Mathematics (1986) Harvard University

Employment

1986-1993: Assistant Professor, Dept. of Industrial Engineering and Management Sciences, Northwestern University, Evanston IL, USA
1993-1997: Associate Professor, Dept. of Industrial Engineering and Operations Research, University of Massachusetts, Amherst MA, USA
1997-2005: Associate Professor, Dept. of Statistics, Athens University of Economics and Business, Athens, Greece
2005-Present: Professor, Dept. of Statistics, Athens University of Economics and Business, Athens, Greece

Administration

- 1995-1996. Graduate Program Director, Department of Industrial Engineering and Operations Research, University of Massachusetts, Amherst, MA, USA.
- Vice-Chair, Department of Statistics, Athens University of Economics and Business, 2002-2006.
- Chair, Department of Statistics, Athens University of Economics and Business, 2006-2008.
- Graduate Program Director, Department of Statistics, Athens University of Economics and Business, 2002-2006.

Honors and Awards

- Publication [3] won the Best Publication Award, TIMS College on Simulation, 1990.
- Publication [2] cited among the 50 Most Influential Papers during the period 1954-2004 by the *Management Science* Editorial Board.
- Research Initiation Award, The National Science Foundation, 1988.
- Harvard University Fellowship, 1982.

Research Interests

Applied Probability, Queueing Systems, Stochastic Simulation, Applications in Manufacturing and Risk Management.

Publications in Journals

1. Ho, Y.C., R. Suri, X.R. Cao, G.W. Diehl, J.W. Dille and M.A. Zazanis. "Optimization of large multiclass (non-product-form) queueing networks using perturbation analysis", *Large Scale Systems*, **7**, 165-180, 1984.
2. Suri, R. and M.A. Zazanis. "Perturbation Analysis gives strongly consistent sensitivity estimates for the M/G/1 queue", *Management Science*, **34** (1) 39-64, 1988.
3. Heidelberger, P., X.R. Cao, M.A. Zazanis, and R. Suri. "Convergence Properties of Infinitesimal Perturbation Analysis", *Management Science*, **34** (11) 1281-1302, 1988.
4. Zazanis, M.A. "Infinitesimal perturbation analysis estimates for moments of the system time of an M/M/1 queue", *Operations Research*, **38**, 364-370, 1990.
5. Wardi, Y., M.A. Zazanis and M. Luo. "Consistency of perturbation analysis for a queue with finite buffer space and loss policy", *Journal of Optimization Theory and Applications*, **68**, 181-202, 1991.
6. Spearman, M.L. and M.A. Zazanis. "Push and Pull production systems: Issues and comparisons", *Operations Research*, **40**, 521-532, 1992.
7. Zazanis, M.A. "Sample Path Analysis of Level Crossings in Queueing Systems", *Queueing Systems*, **11**, 419-428, 1992.
8. Zazanis, M.A. "Analyticity of Poisson Driven Systems", *Advances in Applied Probability*, **24**, 532-541, 1992.
9. Konstantopoulos, P., and M.A. Zazanis. "Sensitivity Analysis for Stationary and Ergodic Queues", *Advances in Applied Probability*, **24**, 738-750, 1992.
10. Zazanis, M.A. and R. Suri. "Convergence rates of finite-difference sensitivity estimates for stochastic systems", *Operations Research*, **41**, 694-703, 1993.
11. Hu, J.Q., and M.A. Zazanis. "Sample Path Analysis of Queues with Bounded Workload", *Queueing Systems*, **14**, 203-213, 1993.
12. Konstantopoulos, P., and M.A. Zazanis. "Sensitivity Analysis for Stationary and Ergodic Queues: Additional results", *Advances in Applied Probability*, **26**, 556-560, 1994.
13. Zazanis, M.A. and R. Suri. "Perturbation Analysis of the GI/G/1 queue", *Queueing Systems*, **18**, 199-248, 1994.

14. Zazanis, M.A. "Derivative Estimation via Compensators: Event Averages in Queueing Systems", *Letters of Operations Research*, **17**, 77-84, 1995.
15. Konstantopoulos, P., and M.A. Zazanis. "A discrete-time proof of Neveu's exchange formula", *Journal of Applied Probability*, **27**, 917-921, 1995.
16. Bao, G., C. Cassandras, and M.A. Zazanis. "First and Second Derivative Estimators for Serial Closed Queueing Networks Using Perturbation Analysis", *IEEE Transactions on Automatic Control*, **41** (8) 1116-1136, 1996.
17. Konstantopoulos, P., M. Zazanis, and G. deVeciana. "Conservation laws and reflection mappings with an application to multiclass mean value analysis for stochastic fluid queues," *Stochastic Processes and their Applications*, **65**, 139-146, 1996.
18. Bao, C. Cassandras, and M. Zazanis. "First and Second Derivative Estimators for Closed Jackson-like Queueing Networks Using Perturbation Analysis Techniques," *Journal of Discrete Event Systems*, **7** (1) 29-67, 1997.
19. Zazanis, M.A. "Formulas and Representations for Cyclic Markovian Networks via Palm Calculus", *Queueing Systems*, **26** (1-2) 151-167, 1997.
20. Zazanis, M.A. "Functional Versions of Little's Law", *Stochastic Processes and their Applications*, **74** (2) 195-201, 1998.
21. Shanthikumar, J.G., and M.A. Zazanis. "Inequalities between Time and Event Averages", *Probability in Information and Engineering Science*, **13** (3) 293-308, 1999.
22. Pinotsi, D. and M.A. Zazanis. Stability Conditions for Gated M/G/ ∞ Queues, *Probability in the Engineering and Informational Sciences*, **18** (1) 103-110, 2004.
23. Makatis, G. and M.A. Zazanis. Smoothed Monte Carlo Estimators for the Time-in-the-Red in Risk Processes, *Mathematical Methods of Operations Research*, **59** (2) 329-342, 2004.
24. Zazanis, M.A. "Cycle Times in Single Server Cyclic Jackson Networks," *Operations Research Letters*, **32** (5) 422-430, 2004.
25. Zazanis M.A. The Time-to-Empty for Tandem Jackson Networks, *Probability in the Engineering and Informational Science*, **18** (4) 493-502, 2004.
26. Zazanis, M.A. "Infinite Server Queues with Synchronized Departures Driven by a Single Point Processes," *Queueing Systems*, **48**, 309-338, 2004.
27. D. Pinotsi and M.A. Zazanis. "Synchronized queues with deterministic arrivals," *Operations Research Letters*, **33** (6) 560-566, 2005.
28. Zazanis, M.A. Asymptotic Variance of Mean Passage Time Estimators in Markov Chains, *Probability in the Engineering and Informational Science*, **21**, 217-234, 2007.

29. Zaphiropoulos, Y. and M.A. Zazanis. "Discrete Time Risk Processes with After-Effects and Association", *Stochastic Models*, **26**(1) 27-45, 2010.
30. Mytalis C.G. and M.A. Zazanis. "Central Limit Theorem Approximations for the Number of Runs in Markov-Dependent Binary Sequences", *Journal of Statistical Planning and Inference*, **143**, 321-333, 2013.
31. Mytalis C.G. and M.A. Zazanis. "Central Limit Theorem Approximations for the Number of Runs in Markov-Dependent Multi-Type Sequences", *Communications in Statistics: Theory and Methods*, **43**(7) 1340-1350, 2014.
32. Roumelioti E.E., M.A. Zazanis, and N.E. Frangos. "Sensitivity of the Joint Survival Probability for Reinsurance Schemes", *Mathematical Methods in the Applied Sciences*, **37**(2) 289-295, 2014.
33. Mytalis C.G. and M.A. Zazanis. "An $M^X/G/1$ Queueing System with Disasters and Repairs under a Multiple Adapted Vacation Policy", *Naval Research Logistics* **62**(3) 171-189, 2015.
34. Mytalis C.G. and M.A. Zazanis. "Service with a Queue and a Random Capacity Cart: Random Processing Batches and E-Limited Policies", *Annals of Operations Research*. 2015, doi.org/10.1007/s10479-015-2077-0.
35. Konstantopoulos T., Y. Yuan, and M.A. Zazanis. "A fully stochastic approach to limit theorems for iterates of Bernstein operators", *Expositiones Mathematicae*. **36**(2) 143-165, 2018.
36. Kesidis, G., Konstantopoulos T., and M.A. Zazanis. "The generating functions of Stirling numbers of the second kind derived probabilistically", *The Mathematical Scientist*, **43**(2) 82-87, 2018.