Michael N. Katehakis

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Areas of Specialization

Applied Research: Service Systems, Supply-Chain Management, Supply-Chain Finance, Data Science, Sustainable Operations Management, Health Care Applications, Queueing
Basic Research: Markov Decision Process, Dynamic Programming, Stochastic Optimization, Simulation

Education

1980 Columbia University, Ph.D. in Operations Research, under Cyrus Derman
1978 University of South Florida, M.A. in Statistics
1976 Columbia University, M.Sc. in Mathematical Methods in Engineering and Operations Research
1974 National and Kapodistrian University of Athens, Greece, B.A.in Mathematics, minor in Physics

Professional Experience

1989- *Professor* of Operations Research, Rutgers University
- Department of Management Science and Information Systems (MSIS)
- *Distinguished Professor* (2016-) · *Professor* (1997-2016) · *Associate Professor* (1989-1997)
  - ◇ *Chairman*, MSIS Department, Rutgers Business School, 2011 -
  - ◇ *Vice Chairman*, MSIS Department, Rutgers University, 1997-1998
- *Courtesy Appointment*, Department of Supply Chain Management, Rutgers Business School
- *Courtesy Appointment*, Department of Mathematics, New Brunswick

2016 (Jan) *Epstein Visitor*, Industrial and Systems Engineering Dept., University of Southern California, CA
2012-14 (Su) *Visitor*, *Mathematisch Instituut*, University of Leiden, The Netherlands
2000 (F) *Visiting Professor* of Operations Research, Division of Applied Mathematics, University of Crete, Greece
1995-05 Research Associate and V.P., Neotronics Corporation, NY
1994 (Jan.) *Visitor*, *School of Management*, Technion, Israel
1991,94 (F) *Visiting Associate Professor* of Operations Research, Division of Statistics and Operations Research, National and Kapodistrian University of Athens, Greece
1989-90 *Visiting Scholar*, Industrial Engineering and Operations Research, Columbia University
1987-88 (Su) *Senior Research Scientist*, Department of Mathematical Statistics, Columbia University
1985-89 *Associate Professor* of Operations Research, Technical University of Crete, Greece
1985 (F) *Guest Scientist*, Department of Applied Mathematics, Brookhaven National Laboratory, Upton, NY
1985 (Sp, Su) *Visiting Assistant Professor* Department of Operations Research, Stanford University
1984 (Su) *Visiting Assistant Professor*, Department of Operations Research, Stanford University
1983 (F) *Consultant*, Department of Nuclear Energy, Brookhaven National Laboratory, Upton, NY.
1981-84 *Assistant Professor*, Department of Applied Mathematics and Statistics SUNY at Stony Brook
1981-82 *Adjunct Assistant Professor*, Industrial Engineering and Operations Research, Columbia University
1980-81 *Member of Technical Staff*, Bell Telephone Laboratories, Operations Research Center
1977-80 *Graduate Assistant*, Department of Industrial Engineering and Operations Research, Columbia University

Other Professional Activities

Research Centers

2015 Founding Director, *Applied Probability and Data Analytics Laboratory* (APDA), Rutgers University.

1988 Founding Director, *Dynamic Systems and Simulation Laboratory* (DSSL), University of Crete.

2013 Primary Investigator, *Center for Dynamic Data Analytics* (CDDA) at Rutgers University.

2014 Member, *Center for Discrete Mathematics and Theoretical Computer Science* (DIMACS) at Rutgers University.

1992 Member, *Rutgers Center for Operations Research* (RUTCOR) at Rutgers University.

Distinctions

Fellow (2012) of the Institute for Operations Research and the Management Sciences (INFORMS)
For fundamental contributions to the theory and practice of operations research in the areas of dynamic programming and data-driven analytics

Elected Member (2012) of the International Statistical Institute (ISI)

Senior Member (2012) of the Institute of Electrical and Electronics Engineers (IEEE)

Wolfowitz Prize (1992)
For the introduction of dynamic sampling in surveys in the paper 'Dynamic allocation in survey sampling', (with Govindarajulu Z.) published in a special volume of the *American Journal of Mathematical and Management Sciences* in honor of Herbert E. Robbins

Dean's Meritorious Award for Research (2014)
Rutgers Business School - Newark and New Brunswick

Beta Gamma Sigma the U.S. National Business School Honorary Society

Omega Rho the U.S. National Operations Research Honorary Society

Washington Academy of Sciences, *Elected Member*

Greek Government Fellowship 1972-1973

Featured in:

American Men & Women of Science: A Biographical Directory of Today's Leaders in Physical, Biological and Related Sciences, v. 8, 4439-4439, 2015.
American Men & Women of Science: A Biographical Directory of Today's Leaders in Physical, Biological and Related Sciences, v. 4, 298-298, 2014.

Grants

1. *Principal Investigator:* 'Collaborative Research: Theoretical and Algorithmic Advances in Sequential Adaptive Decisions' National Science Foundation grant CMMI-1662629, 2017-2020, $428,293. Collaborator S.M. Ross with CMMI-1662442 ($350,000) for a total project of $778,293.
2. *Principal Investigator:* 'EAGER: Event-Driven, Goal-Oriented Dynamic Resource Deployment', National Science Foundation grant CMMI-1450743, 2014-2016, $150,000.
3. *Principal Investigator:* 'Support for Rutgers Applied Probability Conference Series', Stony Brook University, & Rutgers Centers of CDDA, RUTCOR, and SCM, the Cardiovascular Institute of New Jersey, 2014-2015, $65,000.
4. *Principal Investigator:* 'Estimation of Demographic Attributes of Customers', CPR | Strategic Marketing Communications, NJ., 2013-2014, $3,000.
5. *Principal Investigator:* 'Research on Adaptive Estimation and Control of Dynamical Systems', (with H. Robbins, co-PI). National Science Foundation grant DMS 97-03812, 1997-2002, $100,000.
6. *Principal Investigator:* E.E.C. - Greek government grant for Research and Development of a *'Simulation and Dynamical Systems Laboratory'* at the Technical University of Crete, Greece. 1988, $100,000.
7. *Principal Investigator:* 'Studies in Reliability and Inference' (with H. Robbins, co-PI), Air Force Office of Scientific Research contract AFOSR-87-0072, 1987-1988, $52,000.

8. *Principal Investigator:* 'Adaptive Sampling and Stochastic Scheduling' (with E. Beltrami, co-PI), National Science Foundation grant ECCS 85-07671, 1985-1986, $35,000.
9. *Principal Investigator:* 'Inference and Maintenance of Reliability Systems' (with L. Kuo and H. Robbins, co-PIs), Air Force Office of Scientific Research contract AFOSR-84-0136, 1984-1986, $145,000.

10. *Co-Principal Investigator:* 'Large Scale Data Analytics for Cardiovascular Diseases' (with Xiaodong Lin (RBS), Jerry Cheng (RBHS), John Kostis (RBHS), Hemal Gada (RBHS), Minge Xie (RU-NB)), Chancellor's Seed Grants, 2015-2016, $70,000.
11. *Co-Principal Investigator:* 'Developing and Implementing an Innovative Instruction Methodology for MSIS Courses' (with B. Avi-Itzhak, R. Armstrong, V. Atluri, A. Ben-Israel, J. Eckstein, A. Gal, S. Herschkorn, B. Melamed, Z. Stoumbos), GE Fund Learning Excellence Project grant, 1998 - 1999, $14,000.

Editorial

- *WSEAS Transactions on Business and Economics*, Editor in Chief, 1/2015 -
- *Annals of Operations Research*, Associate Editor, 2012 -
- *Mathematics of Operations Research*, Associate Editor, 2014 -
- *Naval Research and Logistics*, 2004 -
- *Operations Research Letters*, 2014 -
- *Probability in the Engineering and Informational Sciences*, Associate Editor, 1997 -
- *Journal of the Washington Academy of Sciences*, Board of Discipline Editors, 2015-
- *American Journal of Mathematical and Management Sciences*, 1995 - 2006
- *Advances in Operations Research*, Associate Editor, 2009 - 2014
- *Encyclopedia of Business Analytics and Optimization*, Associate Editor, 2012-2014
- *International Journal of Strategic Decision Sciences*, 2011 - 2014

Frequent Referee for Journals

- INFORMS: Operations Research, Management Science, M&SOM, Mathematics of Operations Research
- IMS: Annals of Applied Probability
- Other: Annals of Operations Research, Computers & Industrial Engineering, European Journal of Operations Research, IBM Journal of Research and Development, International Journal of Production Research, International Journal of Systems Science, International Journal of Environmental Science and Technology, Journal of Applied Probability, Advances in Applied Probability, Stochastic Processes and Applications, Journal of Applied Probability, Proceedings of the National Academy of Sciences, Naval Research Logistics, Telecommunication Systems Journal, QUESTA, Stochastic Processes and Applications, Systems & Control Letters

Judge

- Chair, Naval Research Logistics 2014 Harold W. Kuhn Award Panel
- 2014 INFORMS Innovative Applications in Analytics Award,
  at the Semi-Final: 10/2013 competition
- 2013 INFORMS Innovative Applications in Analytics Award
  at the Semi-Final: 10/2012 and at the Final 3/2013 competitions
- 2013 INFORMS Interactive Sessions Award
- IEEE Senior Member Panel, 2012
- The Jacob Wolfowitz Prize 1993-2009
- Member of Academic Program evaluation forseveral universities in Greece
- Reviewer for tenure and promotions for Columbia University, the University of South Florida, Stevens Institute of Technology NJ, Leiden University The Netherlands, National and Kapodistrian University, Greece, University of Crete, Greece, the Hellenic Military Academy, the University of the Aegean, Greece

Funding Agencies

- The National Science Foundation
- The National Research Council
- The Netherlands Organization for Scientific Research (NWO)
- The National Science Foundation of Greece
- The CRDF Global

Selected Publications

Refereed Journal Publications

1. Cowan W., Honda J. and M. N. Katehakis (2018). 'Normal Bandits of Unknown Means and Variances: Asymptotic Optimality, Finite Horizon Regret Bounds, and a Solution to an Open Problem', first version online at: arxiv.org/abs/1504.05823, *Journal of Machine Learning Research* (JMLR) 18(154), 1-28.
2. Burnetas A., Kanavetas O. and M. N. Katehakis (2017). 'Asymptotically Optimal Multi-Armed Bandit Policies under a Cost Constraint', *Probability in the Engineering and Informational Sciences*, 31 (3), 284-310
3. Katehakis M.N., Melamed B. and J. Shi (2016). 'Cash-Flow Based Dynamic Inventory Management', *Production and Operations Management*, *Production and Operations Management Journal* (POMS), 25(9), 1558-1575. DOI: 10.1111/poms.1257.
4. Katehakis M.N., Smit L.C. and F.M. Spieksma (2016). 'A Comparative Analysis of the Successive Lumping and the Lattice Path Counting Algorithms', *Journal of Applied Probability*, 53(1): 106-120.
5. Chen, W., Fleischhacker A. and M.N. Katehakis (2015). 'Dynamic Pricing and Inventory Control in a Dual Market Environment', *Naval Research Logistics,* 62(7): 531?549, DOI: 10.1002/nav.21663.
6. Katehakis M.N., Melamed B. and J. Shi (2015). 'Optimal Replenishment Rate for Inventory Systems with Compound Poisson Demands and Lost-Sales: A Direct Treatment of Time Average Cost', *Annals of Operations Research*, 1-27, DOI: 10.1007/s10479-015-1998-y.
7. Cowan, W. and M. N. Katehakis (2015). 'Multi-Armed Bandits under General Depreciation and Commitment', *Probability in the Engineering and Informational Sciences,* 29(1): 51-76.
   ⋆ Finalist of the New Jersey Chapter of INFORMS 6th Annual Student Contest
8. Katehakis M.N., Smit L.C. and F.M. Spieksma (2015). 'DES RES Processes and their Explicit Solutions", *Probability in the Engineering and Informational Sciences*, 29: 191-217.
   ⋆ Winner of the New Jersey Chapter of INFORMS 5-th Annual Student Contest
9. Puranam K.S. and M.N. Katehakis (2014). 'On Optimizing Taboo Criteria in Markov Decision Processes', *International Journal of Applied Decision Sciences*, 7(1): 33-43.
10. Puranam K.S. and M.N. Katehakis (2014). 'On Optimal Bidding and Inventory Control in Sequential Procurement Auctions: The Multi Period Case', *Annals of Operations Research*, 217: 447-462.
11. Shi, J., Katehakis M.N., Melamed B. and Y. Xia (2014). 'Optimal Replenishment Rate for Inventory Systems with Compound Poisson Demands and Lost-Sales under Discounting', *Operations Research*, 6 (5): 1048 - 1063.
12. Shi J., Katehakis M.N. and B. Melamed (2013) 'Pricing the Penalty Function for Inventory Overage and Underage via Martingale Methods', *Annals of Operations Research*, 208(1): 593–612.
13. Katehakis M.N, Ross S.M., Olkin I. and J. Yang (2013). 'The Life and Work of Cyrus Derman', in *Optimization under uncertainty: costs, risks and revenues Cyrus Derman memorial volume I*, Katehakis M.N., Ross S.M. and J. Yang (Eds.) *Annals of Operations Research*, 208(1): 5-26.
14. Tavana M., Zandi F. and M.N. Katehakis (2013). 'A Hybrid Fuzzy Group ANP-TOPSIS Framework for E-government Readiness Assessment from a CiRM Perspective', *Information & Management*, 50: 383 - 397.

15. Katehakis M.N and K.S. Puranam (2012). 'On Optimal Bidding in Sequential Procurement Auctions', *Operations Research Letters*, 40(4): 223-306.
16. Katehakis M.N and L.C. Smit (2012). 'A Successive Lumping Procedure for a Class of Markov Chains', *Probability in the Engineering and Informational Sciences,* 26 (4): 483-508.
    ⋆ Finalist of the New Jersey Chapter of INFORMS 4-th Annual Student Contest
17. Katehakis M.N and L.C. Smit. (2012). 'Efficient Algorithms for Computing an Optimal (R,Q) Policy in Continuous Review Stochastic Inventory Systems with Quantity Discounts', *Annals of Operations Research*, 200(1): 279-298, 2012.
18. Katehakis M.N and K.S. Puranam (2012). 'On Bidding for a Fixed Number of Items in a Sequence of Auctions', *European Journal of Operations Research*, 222(1): 76-84.
19. Zhou, B., M.N. Katehakis and Y. Zhao (2009). 'Stochastic inventory Systems With Free Shipping Options', *European Journal of Operations Research*, 196(1): 186-197.
20. Ungureanu V., Melamed B. and M.N. Katehakis (2008). 'Effective Load Balancing for Cluster-based Servers Employing Job Preemption', *Journal of Performance Evaluation*, 65(8) 606-622.
21. Zhao, Y., Zhou B. and M.N. Katehakis (2007). 'Effective Control Policies for Stochastic Inventory Systems with Minimum Order Quantity and Linear Costs' *International Journal of Production Economics*, 106(2): 523-531.
22. Bradford, P. G. and M.N. Katehakis (2007). 'Insight into Combinatorial Expanders' , *SIAM Journal on Computing*, 37(1): 83-111.
23. Bradford P. G. and M.N. Katehakis (2007). 'Constrained Inventory Allocation and its Applications', *WSEAS Transactions on Mathematics*, 6(2): 263-270.
24. Katehakis M.N. and K.S. Puranam (2007). 'On Optimal Replacement Under Semi-Markov Conditions', 'WSEAS Transactions on Mathematics', 6(3): 330-334.
25. Ungureanu V., Melamed B., Katehakis M.N. and P.G. Bradford (2006). 'Deferred Assignment Scheduling in Cluster-Based Servers' *Cluster Computing* 9(1): 57-65.
26. Zhao, Y. and M.N. Katehakis (2006). 'On the Structure of Optimal Ordering Policies for Stochastic Inventory Systems with Minimum Order Quantity', *Probability in the Engineering and Informational Sciences*, 20(2): 257-270.
27. Ungureanu V., Melamed B. and M.N. Katehakis (2004) 'Performance Comparison of Assignment Policies on Cluster-based E-Commerce Servers', *WSEAS Transactions*, 13-21.
    Also in Proceedings of the International Conference on Software Engineering Systems, 2/2004, Salzburg, Austria.
28. Burnetas, A.N. and M.N. Katehakis (2003). 'Asymptotic Bayes Analysis for the Finite Horizon One Armed Bandit Problem', *Probability in the Engineering and Information Sciences*, 17 (1): 53-82.
29. Gursoy, K. and M.N. Katehakis (2002). 'On Maximizing The Availability of Two Component Series Systems In Discrete Time', *American Journal of Mathematical and Management Sciences*, 23(1): 61-73.
30. Burnetas, A.N. and M.N. Katehakis (1998) 'Dynamic Allocation Policies for the Finite Horizon One Armed Bandit problem', *Stochastic Analysis and Applications*, 16(1): 845-859.
31. Burnetas, A.N. and M.N. Katehakis (1997). 'On Confidence Intervals from Simulation of Finite Markov Chains', *Mathem. Meth. Operat. Res. (ZOR)*, 47 (3): 241-250.
32. Burnetas, A. N. and M. N. Katehakis (1997). 'Optimal Adaptive Policies for Markovian Decision Processes', *Mathematics of Operations Research*, 22(1): 222-255.
33. Katehakis M.N. and U.G. Rothblum (1996). 'Sensitive optimal policies for the discounted multi-armed bandit problem', *Annals of Applied Probability*, 6(3): 1024-1034.
34. Burnetas, A.N. and M.N. Katehakis (1996). 'Optimal Adaptive policies for sequential allocation problems', *Advances in Applied Mathematics*, 17: 122-142.
35. Burnetas, A.N. and M.N. Katehakis (1996) 'On large deviation properties for sequential allocation problems', *Stochastic Analysis and Applications*, 14(1): 13-31.

36. Katehakis M.N. and H.E. Robbins (1995). 'Sequential choice from several populations', *Proceedings of the National Academy of Sciences USA*, 92: 8584 -8565.
37. Burnetas, A.N. and M.N. Katehakis (1995). 'Computing optimal policies for Markovian decision processes using simulation', *Probability in the Engineering and Information Sciences*, 9: 525-537.
38. Katehakis M.N. and C. Melolidakis (1994). 'On The Optimal Maintenance of Systems and Control of Arrivals in Queues', *Stochastic Analysis and Applications*, 8 (2): 12-25.
39. Burnetas, A.N. and M.N. Katehakis (1993). 'On Sequencing Two Types of Tasks on a Single Processor under Incomplete Information', *Probability in the Engineering and Information Sciences*, 7, 85-119. 1.
40. Govindarajulu, Z. and M.N. Katehakis (1991). 'Dynamic Allocation in Survey Sampling', *American Journal of Mathematical and Management Sciences*, 8, 1-14.
    ⋆ Winner of the 1992 Jacob Wolfowitz Prize
41. Katehakis M.N. and C. Melolidakis (1990). 'On Stochastic Optimality of Policies in First Passage problems', *Stochastic Analysis and Applications*, 8 (2): 12-25.
42. Katehakis M.N. and C. Derman (1989). 'On The Maintenance of Systems Composed of Highly Reliable Components', *Management Science*, 6 (5): 16-28.
43. Katehakis M.N. and C. Melolidakis (1988). 'Dynamic Repair Allocation for a K out of N System Maintained by Distinguishable Repairmen', *Probability in the Engineering and Information Sciences*, 2, 51-62. 2.
44. Johri, P. and M. N. Katehakis (1988). 'Scheduling Service in Tandem Queues Attended by a Single Server', *Stochastic Analysis and Applications*, 6 (3): 279-288.
45. Katehakis M.N. and A. F. Veinott Jr. (1987). 'The Multi-Armed Bandit Problem: Decomposition and Computation', *Mathematics of Operations Research*, 22 (2): 262-268.
46. Katehakis M.N. and C. Derman (1987). 'Optimal Repair Allocation in a Series System, Expected Discounted Operation Time Criterion', *Stochastic Analysis and Applications*, 5 (4): 387-394.
47. Katehakis M.N. and C. Derman (1987). 'Computing Optimal Sequential Allocation Rules in Clinical Trials' Adaptive Statistical Procedures and Related Topics (J. Van Ryzin ed.)
    I.M.S. Lecture Notes-Monograph Series, 8, 29-39.
48. Chen, Y.R. and M.N. Katehakis (1986). 'Linear Programming for Finite State Multi - Armed Bandit Problems', *Mathematics of Operations Research*, 11 (1): 180-183.
49. Durinovic, S., Y. Lee, M.N. Katehakis and J. Fillar (1986). 'Multi objective Markov Decision Processes with Average Cost Criteria', *Large Scale Systems*, 10, 215-226 .
50. Katehakis M N. and A. Levine (1986). 'Allocation of Distinguishable Servers', *Computers and Operations Research*, 13 (1): 85-93.
51. Katehakis M.N. and A. Levine (1986). 'A Dynamic Routing Problem - Numerical Procedures for Light Traffic Conditions', *Applied Mathematics and Computation*, 17 (3): 267-276.
52. Katehakis M.N. (1985). 'A Note on the Hypercube Model', *Operations Research Letters*, 3 (6): 319-322.
53. Johri, P. and M. N. Katehakis (1985). 'Further Insight into the Structure of the Bold and Timid Policies', *Advances in Applied. Probability*, 17 (2): 298-307.
54. Beltrami, E., S. Durinovic and M. N. Katehakis (1985). 'Multi objective Markov Decisions in Urban Modelling', *Mathematical Modeling*, 6, 333-338.
55. Katehakis M.N. and P. Johri (1984). 'Optimal Repair of a 2-Component Series System with Partially Repairable Components', *IEEE Trans. on Reliability*, R-33 (5): 427-430.
56. Katehakis M. N. and C. Derman (1984). 'Optimal Repair Allocation in a Series System', *Mathematics of Operations Research*, 9 (4): 615-623.

Refereed Conference Proceedings

57. Cowan, W. and M. N. Katehakis (2015). 'Simple Adaptive Policies with (a.s.) Arbitrarily Slow Growing Regret for Sequential Allocation Problems', *under review*.
58. Katehakis M.N. and K.S. Puranam (2015). 'On Optimal Bidding in Internet Concurrent Auctions', *Proceedings of the 6th European Conference on Applied Mathematics and Informatics*, 35-40.
59. Katehakis M.N. (2012). 'Quantile Estimation', 4 pp. *Proceedings of the 7th INFORMS Workshop on Data Mining and Health Informatics (DM-HI 2012)* H. Yang, D. Zeng, O. E. Kundakcioglu, eds.,INFORMS.
60. Katehakis M.N and W. Chen (2007). 'Optimal (s,S) Booking Policies with Fixed Penalty', *Systems Theory And Applications- Proceedings of the 11th WSEAS International Conference on Systems*, 342- 347.
61. Katehakis M.N and W. Chen (2007). 'The Applications of Ameso Optimization in Supply Chains', *Proceedings of the 6th WSEAS International Conference on Information Security and Privacy*, Tenerife, Spain, pp. 14-16.
62. Katehakis M.N and K.S. Puranam (2006). 'A Note on the Optimal Replacement Problem', *Proceedings of the 10th WSEAS International Conference on Applied Mathematics*, 498-500.
63. Bradford, P.G. and M.N. Katehakis (2006). 'Constrained Inventory Allocation', *Proceedings of the 10th WSEAS International Conference on Applied Mathematics*, 504 - 507.
64. Ungureanu V., B. Melamed and M.N. Katehakis (2004). 'Performance Comparison of Assignment Policies on Cluster-based E-Commerce Servers', *WSEAS Transactions*. Also in Proceedings of the International Conference on Software Engineering, Parallel and Distributed Systems, February 13-15, 2004, Salzburg, Austria.
65. Ungureanu V., B. Melamed B. and M.N. Katehakis (2004). 'The LC* Assignment Policy for Cluster-Based Servers', *IEEE International Symposium on Network Computing and Applications,* Cambridge, MA, pp. 177-184.
66. Ungureanu V., B. Melamed, P.G. Bradford and M.N. Katehakis (2004). 'Class-Dependent Assignment in Cluster-based Servers', *Symposium on Applied Computing, Proceedings of the ACM symposium on Applied computing*, New York, NY, 1420-1425.
67. Ungureanu V., B. Melamed and M.N. Katehakis (2004). 'Performance Comparison of Size-based Scheduling Policies in Clustered Web Servers', *Proc. IADIS International Conference on Applied Computing, I11-I17.*
68. Ungureanu V., B. Melamed and M.N. Katehakis (2003). 'Towards an Efficient Cluster-based E-Commerce Server', *Proc. IEEE Conference on Cluster Computing*, CLUSTER 03, Hong Kong, China, 474-477.
69. Dinopoulou, V. D., Katehakis M.N. and C. Melolidakis (1996). 'Asymptotically Optimal Maintenance of Non-identical K-out-of-N Systems connected in Parallel', *Proc. 4th IEEE Mediterranean Symposium on New Directions in Control & Automation*, Chania, Greece, pp. 552-557.
70. Burnetas, A.N. and M.N. Katehakis (1995). 'Efficient Estimation and Control for Markov Processes', *Proceedings of the 34-th IEEE* Conference on Decision and Control, 1402-1407.
71. Katehakis M.N. and C. Melolidakis (1994). 'Asymptotically Uniformly Optimal Stationary Policies in Two-Tier Reliability Systems', Proc. *6th Conference of the Greek Statistical Institute,* Thessaloniki, Greece, pp. 160-168.

Preprints or Articles under Review

72. Katehakis M.N., Yang J., and Zhou T. (2017). 'Dynamic Inventory and Price Controls Involving Unknown Demand on Discrete Nonperishable Items'.
73. Cowan, W. and M. N. Katehakis (2015). 'Asymptotically Optimal Sequential Experimentation Under Generalized Ranking', *arXiv preprint arXiv:1510.02041 [stat.ML]*
74. Cowan, W. and M. N. Katehakis (2015). 'An Asymptotically Optimal Policy for Uniform Bandits of Unknown Support', *arXiv preprint arXiv:1505.01918 [stat.ML], under review*

75. Cowan, W. and M. N. Katehakis (2015). 'Simple Adaptive Policies with (a.s.) Arbitrarily Slow Growing Regret for Sequential Allocation Problems', *arXiv preprint arXiv:1505.02865 [stat.ML] under review.*
76. Burnetas, A. N., Kanavetas, O. and M.N. Katehakis (2015). 'Asymptotically Optimal Multi-Armed Bandit Policies under a Cost Constraint', *arXiv preprint arXiv:1509.02857 [stat.ML], under review.*
77. Ertiningsih D., Katehakis M.N., Smit L.C. and F.M. Spieksma (2015). 'Level product form QSF processes and an analysis of queues with Coxian inter-arrival distribution', *arXiv preprint arXiv:1507.05298 [math.PR], under revision.*
78. Govindaraj S., Katehakis M. N. and N. Varzgani (2015). 'Valuation of Tax Loss Carry-forwards and Carry-backs, and its Implications for Dynamic Portfolio Selection', *under review.*
79. Katehakis M.N., Yang J., and Zhou T. (2015). 'Inventory Control Involving Unknown Demand of Discrete Nonperishable Items - Analysis of a Newsvendor-based Policy'.

Technical Reports or Articles in Preparation

80. Burnetas A. N. and O. A. Kanavetas (2015). 'Asymptotically Optimal Sequential Experimentation Under Side Constraints'.
81. Derman C., Katehakis M.N., Ross S.M. and F.M. Spieksma (2015). 'Non-Parametric Up-And-Down Experimentation Revisited'
82. Katehakis M.N. and F.M. Spieksma (2015). 'On The Average Cost Optimality Equations for MDPs'.
83. Katehakis, M.N., Smit, L. and F.M. Spieksma (2015). 'On the Solution to a Possibly Countable System of Equations Arising in Stochastic Processes'.
84. Cowan, W. and M.N. Katehakis (2015). 'Asymptotically Optimal Sequential Experimentation Under Generalized Ranking'.
85. Cowan, W. and M.N. Katehakis (2015). 'Halting Multi-Armed Bandits and Single Payout Bandits'.

Other Publications

86. Katehakis M.N, Ross S.M. and J. Yang (2013). 'Optimization under uncertainty: costs, risks and revenues Introduction to: Cyrus Derman memorial volume I, *Annals of Operations Research*, 208(1): 1-1
87. Katehakis M.N, Ross S.M. and J. Yang (2016). 'Optimization under uncertainty: costs, risks and revenues Introduction to: Cyrus Derman memorial volume I, *Annals of Operations Research*, 241(1-2): 1-1

Books, Reports, Edited Volumes

Appeared

88. Katehakis M. N., Ross S.M. and J. Yang (eds) (2016). *'Optimization Under Uncertainty: Costs, Risks and Revenues', Cyrus Derman Memorial Volume II*, *Annals of Operations Research*, 241(1-2) Springer NY, p.p. 573.
89. Mastorakis M.N. and M.N. Katehakis (eds) (2015). *'Mathematical Methods and Systems in Science and Engineering'.* ISBN: 978-1-61804-281-1, WSEAS Press, p.p. 300.
90. Mastorakis M.N., Pardalos M.P. and M.N. Katehakis (eds) (2014). *'Recent Advances in Applied Economics'* Proceedings of the 6th International Conference on Applied Economics, Business and Development (AEBD '14), ISBN: 978-960-474-394-0, WSEAS Press, pp. 155.
91. Katehakis M. N., Ross S.M. and J. Yang (eds) (2013). *'Optimization Under Uncertainty: Costs, Risks and Revenues', Cyrus Derman Memorial Volume I*, *Annals of Operations Research*, in press, Springer NY.
92. Katehakis M.N., Zamora A. and R. Alvarez (eds) (2007). *'Advanced Topics In Information Security And Privacy'* Proceedings of the 6-th WSEAS Conference on Information Security and Privacy (ISP07), ISBN: 978-960-6766-23-7, WSEAS Press, p.p. 202.

93. Katehakis M.N., Andina D. and N. Mastorakis (eds) (2007). 'Computational Intelligence, Man Man-Machine Systems and Cybernetics' Proceedings of the 6th WSEAS International Conference on Computational Intelligence, Man-Machine Systems And Cybernetics(CIMMACS '07). ISBN: 978-960-6766-21-3, WSEAS Press, p.p. 414.
94. Robbins, H.E. and M. N. Katehakis (1988). *'Studies in Reliability and Inference'.* Defense Technical Information Center.
95. Katehakis M. N. (1987). *'Notes on Dynamic Programming'*, Technical University of Crete. 260 p.p..
96. Katehakis M.N., Kuo L. and Robbins H. E. (1984). *'Optimal Maintenance and Inference in Reliability'.* Defense Technical Information Center.
97. Katehakis M. N. (1980). *'On the Optimal Maintenance of Reliability Systems'*, Ph.D. Thesis, Columbia University, NY.

Forthcoming

98. Feinberg E, Kaspi H., Katehakis M.N. and F.M. Spieksma (2017). *'Probability Methods in Business and Industry'.* Special Volume In Honor of Benjamin Avi-Itzhak and Matthew J. Sobel, *Annals of Operations Research*, Springer NY, forthcoming.
99. Kapodistria S., Katehakis M.N., Ross S.M. and Lewis M.E. (2017). *'Stochastic Models and Algorithms'* Special Volume In Honor of Professor Eugene A. Feinberg on his 60th birthday, *Annals of Operations Research*, Springer NY, forthcoming.
100. Federgruen A., Katehakis M. N., Spieksma F.M. and Y. Ye (eds) (2017). Second Rutgers Applied Probability Conference on : *Stochastic Methods in Information Technology*, Arthur F. Veinott, Jr. Memorial Volume, *Naval Research Logistics (NRL)*, Wiley NY.
101. Federgruen A., Katehakis M. N., Spieksma F.M. and Y. Ye (eds) (2017). Second Rutgers Applied Probability Conference on : *Stochastic Methods in Information Technology*, Uriel G. Rothblum Memorial Volume, *Naval Research Logistics (NRL)*, Wiley NY.
102. Kapodistria S., Katehakis M.N., Kostis J.B., Metaxas, D.N. and F.M. Spieksma (eds) (2016). *Analytic Methods in Health Care and in Clinical Trials*, Lee Papayanopoulos Memorial Volume, *Probability in the Engineering and Informational Sciences*, Cambridge University Press UK.

Courses Taught

Taught a variety of graduate and undergraduate courses, in Business Analytics: Operations Research, Statistics, Stochastic Processes and Supply Chains, at four Universities in the U.S. (Columbia, Rutgers, Stanford and SUNY at Stony Brook) and two in Greece (National and Kapodistrian University at Athens and University of Crete). Course related material and syllabi are available on line at my *Teaching Page* and at the Production and Operations Management *Online Class Site.*

Courses taught at Rutgers

Graduate

1. Stochastic Models in Operations Research (PhD)
2. Stochastic Methods in Supply Chains (MS, PhD)
3. Stochastic Models & Applications in Supply Chains & Marketing (MS, PhD)
4. Stochastic Dynamic Programming (PhD)
5. Stochastic Processes (MS, PhD)
6. Data Analysis (MBA)
7. Deterministic Optimization Models (MBA)
8. Linear Stat. Models (MBA)
9. Optimization Methods in Finance (MS & PhD)
10. Supply Chain Logistics (MBA)

Undergraduate

11. Data Warehousing (BA)
12. Operations Management (BA)
13. Production and Operations Management (BA)

Courses taught at other Universities

Graduate

14. Reliability and Maintenance of Systems, Athens University (PhD)
15. Markovian Decision Processes, Columbia University (MS & PhD)
16. Linear Programming, Columbia University and SUNY Stony Brook (MS & PhD)
17. Queuing Theory, SUNY Stony Brook (MS & PhD)
18. Topics in Applied Mathematics, SUNY Stony Brook (PhD)
19. Probability Theory, SUNY Stony Brook (MS & PhD)
20. Non Linear and Dynamic Programming, Athens University (PhD)
21. Applications of Operations Research, Stanford Univ. (MS)

Undergraduate

22. Introduction to Statistical Inference, University of Crete (BA)
23. Probability Theory, University of Crete (BA)
24. Reliability and Maintenance of Systems, University of Crete (BA)
25. Models and Applications of Operations Research in Society, Stanford University (BA)

Doctoral Thesis Supervision

Doctoral Students [Work in Progress at Rutgers]

1. Daniel Pirutinsky, Dept. of Management Science & Information Systems, Rutgers University
   Partial support provided by NSF grant: CMMI-14-50743
2. Aichih Chang (jointly with B. Melamed), Dept. of Supply Chain Management, Rutgers University
3. Ehsan Teymourian (jointly with Mert Gurbuzbalaban), Dept. of Management Science & Information Systems, Rutgers University

Doctoral Students [Completed]

4. Nilofar Varzgani (2018). (jointly with S. Govindaraj), Dept. of Management Science & Information Systems, Rutgers University.
5. Tingting Zhou (2018). (jointly with J. Yang), Dept. of Management Science & Information Systems, Rutgers University
6. Wesley Cowan (2016). Dept. Mathematics, New Brunswick, Rutgers University. *Partial support provided by NSF grant: CMMI-14-50743.* First position: CS department, Rutgers University
7. Wajahat Gilani (2016). Dept. of Supply Chain Management, Rutgers University. First position: Strike Valuation inc. New York
8. Laurens Smit (2014) (jointly with Flora Spieksma - University of Leiden). 'On Successive Lumping of Large Scale Systems', Dept. of Management Science & Information Systems, Rutgers University. First position: University of Leiden
9. Karti S. Puranam (2010). 'Stochastic Analysis of Bidding in Sequential Auctions and Related Problems', Dept. of Management Science & Information Systems, Rutgers University. First position: Lasalle University, School of Business
10. Junmin Shi, (2010) (jointly with B. Melamed). 'Make to Stock Production Inventory Systems with Compound Poisson Demands, Constant Continuous Replenishment', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University. First position: Georgia State University, Robinson College of Business

11. Wen Chen (2008). 'New Models and Solutions for Stochastic Optimization for R&D and Transportation Problems', Dept. of Management Science & Information Systems, Rutgers University. First position: University of Texas at Austin
12. Bin Zhou (2007). 'On Optimal Pricing and Ordering in Supply Chain Management', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University. First position: Kean University, College of Business and Public Administration
13. Timothy T. Elkins, 2003 (jointly with K. Lawrence). 'Multiple Criteria and Dynamic Data Envelopment Analysis with the Freight Service Business', Dept. of Management Science & Information Systems, Rutgers University. First position: N.Y.U, Leonard Stern School of Business
14. Kemal Gursoy, (1997). 'Branch and Bound Methods for Sequentially Choosing Some Among Several Competing Projects', Dept. of Management Science & Information Systems, Rutgers University. First position: Long Island University
15. Apostolos N. Burnetas (1993). 'On Adaptive Estimation and Control for Markovian Decision Processes', Dept. of Management Science & Information Systems, Rutgers University.
Partial support provided by AFOSR contract AFOSR-87-0072
First position: Weatherhead School of Management, Case Western Reserve University
16. Yih-Ren Chen (1984). State University of New York at Stony Brook, 'Stochastic Scheduling Under Incomplete Information', Dept. of Applied Mathematics & Statistics, Stony Brook University.
Partial support provided by AFOSR contract AFOSR-84-0136
First position: ATT-Bell Labs
17. Sanja Durinovic (1984). State University of New York at Stony Brook, 'On Multi-Objective Markov Decision Processes', Dept. of Applied Mathematics & Statistics, Stony Brook University. First position: ATT-Bell Labs
18. Pravin Jhori (1984). 'On Maximizing First Passage Probabilities in Gambling and in Queues', Dept. of Applied Mathematics & Statistics, Stony Brook University. First position: ATT-Bell Labs.
19. Alan L. Levine (1983). 'On the Optimal Operation of Queueing Systems–Asymptotic Results', Dept. of Applied Mathematics & Statistics, Stony Brook University. First position: Franklin and Marshall College.

Doctoral Committee [In Progress]

20. Deniz Eskandani, Dept. of Management Science & Information Systems, Rutgers University
21. Dwi Ertiningsih, Mathematisch Instituut University of Leiden

Doctoral Committee [Completed]

22. Frank Alston (2018). Dept. of Supply Chain Management, Rutgers University.
23. Jingnan Fan (2018). Dept. of Management Science & Information Systems, Rutgers University
24. Javier Rubio-Herrero (2017). Dept. of Management Science & Information Systems, Rutgers University
25. Dionysios Kalogerias (2017). Dept. of Electrical and Computer Engineering, Rutgers University
26. Kwon Gi Mun(2016), Dept. of Supply Chain Management, Rutgers University.
27. Shunqiao Sun (2015). 'Mimo Radars with Sparse Sensing', Dept. of Electrical and Computer Engineering, Rutgers University
28. Yifeng Liu (2014). 'Dynamic Revenue and Inventory Management Models', Dept. of Management Science & Information Systems, Rutgers University
29. Xin Xu (2014). 'Essays on the Interface between Supply Chain and Project Management', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University
30. Sitki Gülten (2014). 'Two-Stage Portfolio Optimization With Higher-Order Conditional Measures of Risk', Dept. of Management Science & Information Systems, Rutgers University
31. Ozlem Cavus (2012). 'Risk-Averse Control of Undiscountod Transient Markov Models', Rutgers Center for Operations Research (RUTCOR), Rutgers University

32. Kathleen M. Iacocca (2011). 'Essays on Drug Distribution and Pricing Models', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University
33. Sungyong Choi (2009). 'Risk-Averse Newsvendor Models', Dept. of Management Science & Information Systems, Rutgers University
34. Fleischhacker, Adam (2009). 'An Investigation of Clinical Trial Supply Chains', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University
35. Ching-Yu Chen (2007). 'Essays on Supply Chain Inventory Management', Dept. of Management Science & Information Systems, Rutgers University
36. Ulas Akkucuk (2004). 'Metric Nonlinear Mapping: Approaches Based on Optimizing an Index of Continuity and Applying Classical Metric MDS on Revised Distances', Dept. of Management Science & Information Systems, Rutgers University
37. Unsal Ozdogru (2000). 'Performance Analysis of Continuous Material Flow Systems', Rutgers Center for Operations Research (RUTCOR), Rutgers University
38. Avsar, Zeynep Muge (1998). 'Algorithms for Stochastic Games and a Stochastic Game Application: Inventory Control Under Substitutable Demand', Dept. of Management Science & Information Systems, Rutgers University
39. Ashis Kumar Dev (1996). 'Essays in Ownership Structure, Firm Value and Insider Trading', City University of New York
40. Ashis Kumar Dev (1983). 'A General Equilibrium Analysis of the Time Structures of Saving, Investment and Financial Decisions', Dept. of Economics, Stony Brook University
41. Aninda K. Bose (1983). Dept. of Economics, State University of New York at Stony Brook, 'Equilibrium Analysis of Cyclic Queues', Dept. of Economics, Stony Brook University