

## Michael N. Katehakis

Distinguished Professor and Chair

Department of Management Science & Information Systems

Rutgers Business School - Newark & New Brunswick

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### Areas of Specialization

**Applied Research:** Data Science, Sustainable Operations Management, Health Care Applications, Queueing, Service Systems, Supply-Chain Management, Supply-Chain Finance

**Basic Research:** Reinforcement Learning, 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 & Operations Research, Columbia University

## Major Research Achievements

- Reinforcement Learning
- Sequential Decisions
- Reinforcement Learning and Machine Learning
- Survey Sampling
- Multi-objective Optimization
- Inventory Control, Blockchains and Supply Chains
- Applied Probability - Stochastic Processes
- Reliability and Queuing

## Professional Leadership

- **2015 Founding Director**, Applied Probability and Data Analytics Laboratory (APDA), Rutgers Univ.
- **1988 Founding Director**, Dynamic Systems and Simulation Laboratory (DSSL), University of Crete

## Honors and Awards

- **2017-2020 Principal Investigator**: ‘Collaborative Research: Theoretical and Algorithmic Advances in Sequential Adaptive Decisions’ National Science Foundation grant CMMI-1662629, 2017-2020, \$428,293. Collaborator SM Ross with CMMI-1662442 (\$350,000) for a total project of \$778,293
- **2015 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)), Newark Chancellor’s Seed Grants, 2015-2016, \$70,000
- **2014-2016 Principal Investigator**: ‘Event-Driven, Goal-Oriented Dynamic Resource Deployment’, National Science Foundation grant CMMI-1450743, 2014-2016, \$150,000
- **2014 Dean’s Meritorious Award for Research** Rutgers Business School - Newark and New Brunswick
- **2012 Fellow 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*
- **2012 Elected Member of the International Statistical Institute (ISI)**<sup>1</sup> *Per ISI: This elected membership is restricted to the most prominent statisticians of the world.*
- **2012 Senior Member of the Institute of Electrical and Electronics Engineers (IEEE)**
- **2011 Washington Academy of Sciences, Elected Member**
- **1998 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, \$14,000.
- **1997 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
- **1992 Wolfowitz Prize** *For the introduction of dynamic sampling in surveys* in the paper ‘Dynamic allocation in

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<sup>1</sup>The International Statistical Institute (ISI) is one of the oldest scientific associations still active throughout the world today.

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

- **1991 Beta Gamma Sigma** the U.S. National Business School Honorary Society
- **1988 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. \$100,000
- **1987 Principal Investigator:** 'Studies in Reliability and Inference' (with H. Robbins, co-PI), Air Force Office of Scientific Research contract AFOSR-87-0072, \$52,000
- **1985 Principal Investigator:** 'Adaptive Sampling and Stochastic Scheduling' (with E. Beltrami, co-PI), National Science Foundation grant ECCS 85-07671, \$35,000
- **1984 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.
- **1972** Greek Government Fellowship
- **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.

## Editorial

- *Transactions on Business and Economics* - WSEAS, 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 -2018
- *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*, *Operations Research Letters*
- IMS: *Annals of Applied Probability*
- *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*

### 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

### Judge

- Naval Research Logistics Harold W. Kuhn Award Panel (2010 - ) Chaired it in 2014
- 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 for several 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

## Conference Organization

### International Conference Organization

1. Member of the Organizing Committee, *25th International Conference on Circuits, Systems, Communications and Computers (CSCC)*, July 19-22, 2021, Chania, Greece.
2. Member of the Organizing Committee, *24th International Conference on Circuits, Systems, Communications and Computers (CSCC)*, July 12-15, 2020, Chania, Greece.
3. Member of the Program Committee, *5th International Conference on Operations Research and Enterprise Systems (ICORES 2019)*, Prague, Czech Republic, February 19-21, 2019
4. Member of the Program Committee, NIPS2018 Neural Information Processing Systems, Long Beach, CA, Dec 3 - Dec 8 , 2018, Montreal, Canada
5. Member of the Program Committee, *5th International Conference on Operations Research and Enterprise Systems (ICORES 2018)*, Madeira, Portugal, January 24-26, 2018
6. Member of the Program Committee, NIPS2017 Neural Information Processing Systems, Long Beach, CA, Dec 4 , 2017 - Dec 9 , 2017
7. Member of the Program Committee, *17th AAAI Conference on Artificial Intelligence (AAAI-2017)*, San Francisco, CA, February 4-9, 2017
8. Member of the Program Committee, NIPS2016 Neural Information Processing Systems, Barcelona Spain, Dec 5 , - Dec 10 , 2016
9. Chair *College of Service Operations Management* Track, Production and Operations Management Society (POMS) Annual Conference, Orlando, Florida, May 6-9, 2016

10. Member of the Program Committee, *5th International Conference on Operations Research and Enterprise Systems* (ICORES 2016), Rome, Italy, February 23-25, 2016
11. Member of the Program Committee, *13th AAAI Conference on Artificial Intelligence* (AAAI-2016), Phoenix, AZ, February 12-17, 2016
12. Member of the Program Committee for CCSI 2015 - *the 2015 International Conference on Systems, Control, Signal Processing and Informatics*, Barcelona, Spain, April 7-9, 2015
13. Member of the Program Committee for CSCC 2015 *the 19th International Conference on Circuits, Systems, Communications and Computers*, Zakynthos, Greece, July 16-20, 2015
14. Co-Chair for AEBD-2014, *6th International Conference on Applied Economics, Business and Development* October 30 - November 1, 2014, Lisbon, Portugal,
15. Member of the Program Committee for AIKED '14: *13th International Conference on Artificial Intelligence, Knowledge Engineering and Data Bases*, Gdansk, Poland, May 15-17, 2014
16. Member of the Program Committee for CSCC 2014, *18th International Conference on Circuits, Systems, Communications and Computers, Santorini*, , Greece, July 17-21, 2014
17. Co-Chair of the Analytics Section Cluster of the 2013 INFORMS Annual Meeting in Minneapolis, Minnesota, October 6-9 2013
18. Member of the Program Committee for EEED 2013 *The 2013 International Conference on Energy, Environment, Ecosystems, and Development*, Rhodes, Greece, July 16-19, 2013
19. Member of the Program Committee for the 7th WSEAS International Conference on Information Security & Privacy, 2008

#### Recent Invited Session Organization at International Conferences

20. Chair: 'New Problems and Methods in Epidemiology', 31st European Conference on Operational Research (Euro2021), Athens Greece, 2021
21. Chair: 'Advances in Data Driven Theory and Models', INFORMS 2019, Seattle WA, 2019
22. 'Advances in Machine Learning Models and Applications', INFORMS 2019, Seattle WA, 2019
23. Chair: 'Joint Session APS/Practice Curated:Data Driven OR Applications', INFORMS 2018, Phoenix AZ, 2018
24. Chair: 'Learning in Markov Decision Processes', INFORMS 19th Applied Probability Society Conference, Evanston, IL, 2017
25. Chair: 'Recent Developments in Markov Decision Processes', INFORMS 19th Applied Probability Society Conference, Evanston, IL, 2017
26. Chair: 'A Collection of State of the Art Analytics Models and Methods', INFORMS Section: Analytics, Philadelphia PA, 2015
27. Chair: 'Revenue Optimization and Related Methodologies', INFORMS - Section: Revenue Management and Pricing, Philadelphia PA, 2015
28. Chair: 'Business Analytics Methods for Demand and Supply Planning and Control', 20th Conference of the International Federation of Operational Research Societies, Barcelona Spain, 2014
29. Chair: 'Advances on Demand and Supply Planning in Consumer Goods and Retailing', 20th Conference of the International Federation of Operational Research Societies, Barcelona Spain, 2014
30. Chair: 'Stochastic Analytics Models and Methods', INFORMS - Section: Analytics, San Francisco CA, 2014

31. Chair: ‘Predictive Analytics Models and Methods’, INFORMS - Section: Analytics, San Francisco CA, 2014
32. Chair: ‘Bidding and Behavior in Procurement Markets’, INFORMS - Section: Auctions, San Francisco CA, 2014
33. Chair: ‘Methods and Models for Intelligence Operations’, 2013 INFORMS Computing Society Conference, Minneapolis, MN, 2013
34. Chair: ‘Optimization under Risk, Successive Lumping and Shape Constrained Estimation’, INFORMS - Computing Society Conference, Minneapolis, MN, 2013
35. Chair: ‘Problems and Models for Repeated Auctions’ INFORMS - Section: Analytics, Minneapolis MN, 2013
36. Co-Chair: ‘Quantitative Methods in Analytics’, INFORMS - Section: Analytics, Minneapolis MN, 2013
37. Chair: ‘Methods and Models for Supply Chain Analytics’, EURO - INFORMS Joint International Meeting, Rome, Italy, 2013
38. Chair: ‘Methods and Models for Supply Chain Analytics’, EURO - INFORMS Joint International Meeting, 26th European Conference on Operational Research, Rome, Italy, 2013
39. Chair: ‘Revenue Optimization and Related MDP Methodologies I’, INFORMS - Section: Revenue Management and Pricing, 2012
40. Chair: ‘Revenue Optimization and Related MDP Methodologies II’, INFORMS - Section: Revenue Management and Pricing, 2012

#### Conference Organization at Institutions I was affiliated with

41. co-Chair of the [Fifth Rutgers Applied Probability Conference](#): Data Driven Analytics and Related Topics, 2017, Rutgers University, *jointly with Drs. E. Boros and J. Yang*
42. Chair of the [Fourth Rutgers Applied Probability Conference](#): Analytic Methods in Health Care and in Clinical Trials, 2015, Rutgers University, *jointly with Drs. J. Kostis and D. Metaxas*
43. Chair of the [Third Rutgers Applied Probability Conference](#): Stochastic Models and Algorithms for Intelligent Business Systems, June 6-7, 2014, Rutgers University, *jointly with Drs. Lei Lei, D. Metaxas, J. Mitchell.*
44. Chair of the [First Electrical and Computer Engineering & Management Science and Information Systems Workshop](#), *jointly with Dr. A. Petropoulou*, April 2014
45. Chair of the [Second Rutgers Applied Probability Conference](#): Stochastic Methods in Information Technology, December 6-7, 2013, Rutgers University, *with INFORMS - NJ Chapter board members & MSIS faculty*
46. Chair of the [First Rutgers Applied Probability Conference](#): Computational Methods of Applied Probability in Business Analytics, November 30, 2012, Rutgers University, *jointly with Drs. Farid Alizadeh, Andrzej Ruszczyński, Hui Xiong.*
47. Chair of the ‘Statistical Reliability, Sequential Methods and Related Topics’ conference at Columbia University, 7/1987. Conference supported by the AFOSR
48. Co-Chair of the ‘Statistical Reliability’ (with Dr. S. Kao) conference at Brookhaven National Laboratory, 1986. Conference supported by the AFOSR

#### Service at Rutgers

- o 2011-: Department Chair
- o 2014-2017: Member of the New Brunswick Faculty Council



- Other department and University Committee service, including Dean's Cabinet, Appointment and Promotions Committee, Research Resources committee Chair, MSIS Department Vice Chair, SAS Dean advisory committee member, and other too numerous to itemize.

### Memberships

- ASA, American Statistical Association
- IEEE, Institute of Electrical and Electronics Engineers, *Senior Member*
- IMS, Institute of Mathematical Statistics
  - ◊ Nominated for *Fellow* in 2012
- INFORMS, The Institute for Operations Research and the Management Sciences
  - ◊ Elected *Fellow* in 2012
  - ◊ *Chair* of the New Jersey Chapter in 2015-2016
- ISI, International Statistical Institute
  - ◊ Elected '*Elected Member*' in 2012
- POMS, Production and Operations Management Society
  - ◊ *President* of the College of Service Operations (CSO), for 2015-2017
- SIAM, Society of Industrial and Applied Mathematics
- 2013 **Primary Investigator**, Center for Dynamic Data Analytics (CDDA), Rutgers University
- 2014 **Member**, Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Rutgers University
- 1992 **Member**, Rutgers Center for Operations Research (RUTCOR), Rutgers University.

### Activities at Main Positions

**Rutgers University, Rutgers Business School - Newark and New Brunswick**, Department of Management Science and Information Systems (MSIS), New Jersey, Chair, 7/2011 - present

- In collaboration with the Dean and department faculty, designed and launched the Strategic Plan for the MSIS department, which is currently comprised by 29 full time (18 tenure track) faculty
- Worked on the design and implementation of the following new degrees:
  - ◊ Undergraduate major in Business Analytics and Information Technology (BAIT) at the New Brunswick campus
  - ◊ Dual MS/MBA degree in Operations Research and Business Analytics
  - ◊ MBA Concentration in Analytics & Information Management (AIM)
  - ◊ Master degree in Information Technology & Analytics (MITA), that incorporated the RUTCOR MS program in O.R. The enrollment has increased from about six (6) students in 2010 to over 240 in 2020
- Grew enrollment by over 100% and overall revenue by over 200%
- Obtained funding for additional scholarships for undergraduate students
- The department recruited 6 tenure track and 4 non-tenure track, faculty members
- Guided faculty through tenure and promotions
- Strongly supported faculty members to obtain recognition and promotion within and outside Rutgers
- Managed the integration of *RUTCOR*, its faculty, students and courses into the MSIS department
- Invited world renown scholars to visit Rutgers and give short courses to our Ph.D. students

- Started, in 2012 and chaired the annual [Rutgers Applied Probability Conference](#)

**Rutgers University, Rutgers Business School - Newark and New Brunswick**, Department of Management Science and Information Systems (MSIS), New Jersey, Professor, 1989 - present

- Taught courses on business analytics, stochastic models in supply chain management, stochastic processes, data models and decisions, deterministic models, operations management, production and operations
- Started in 2010 the MSIS-RUTCOR Seminar that achieved wide recognition as many world renowned scholars were invited as speakers
- Conducted research on business analytics methods, auctions, production-inventory systems, supply chain finance and the multi-armed bandit problem
- Developed several new courses including graduate courses in *Stochastic Models in Operations Research*, *Revenue Management* and the first graduate course on *Stochastic Models In Supply Chains* taught at Rutgers since 1997
- Supervised Ph.D. students in Operations Research and in Supply Chain Management.
- Supervised nine Ph.D. students, eight have completed their Ph.d. theses
- Supervised several Master's theses
- Chair, Dean's Task Force on the Integration of RUTCOR the Rutgers Center for Operations Research with the Rutgers Business School-Newark and New Brunswick
- Member of the [New Brunswick Faculty Council](#), 2014 - 2017
- Member of the Budget and Planning Committee of the New Brunswick Faculty Council, 2014 - 2017  
This Committee considers all matters related to New Brunswick/Piscataway Campus budget priorities and allocations, general planning, and campus facilities
- Department of *Management Science and Information Systems*, *Vice Chair*, 1997 - 1998
- New Brunswick Fellow, 1999-present
- Research Resources Committee, *Chair*, 1998 - 2000
- MSIS department recruitment committee, *Chair*, 1997-1998
- Member of various school committees including, Planning, FASIP (merit) Award, M.B.A. Policy, Curriculum Review, Computer Policy, Dean's Advisory, Chairs, and the Dean's Cabinet, 1989-present

**Rutgers University, Rutgers Business School - Newark and New Brunswick**, Department of Supply Chain Management & Marketing Sciences (SCMMS), affiliated faculty

- In 2002, before the establishment of the SCMMS department, I developed and taught one of the first courses in Supply Chain Management at Rutgers: 26:711:685 *Stochastic Models & Applications in Supply Chains & Marketing*.
- This course later evolved into a core Ph.D. course: 26:799:661 *Stochastic Methods in Supply Chains*.
- Adviser of Ph.D. students whose main research was in Supply Chain Management, including: Bin. Zhou (Ph.D. in 2005), Wen Chen (Ph.D. in 2008), Junmin Shi (Ph.D. in 2010), Karti S. Puranam (Ph.D. in 2010), Wajahat Gilani (Ph.D. in 2016),.
- Advised many other Ph.D. students and served in their committees.
- Prepared Qualifying Exams in Stochastic Processes and Stochastic Methods in SCM.

**Rutgers University, School of Arts and Sciences, New Brunswick**, Department of Mathematics, member of graduate faculty, 2013 - present

- Member of DIMACS the Center for Discrete Mathematics and Theoretical Computer Science, 2013-present
- Primary Investigator at the Center for Dynamic Data Analytics, 2014-present



- Worked with H. Robbins, cf. paper [47] and NSF grant [??]
- Taught the course on Stochastic Models in Operations Research, attended by Math. and Engineering students
- Supervising a department of mathematics doctoral student, 2012 - present

**Technical University of Crete**, Hania, Greece, Associate Professor, 1985 - 1989

- As an elected member of the university 'governing board', contributed to the development of the new academic department of *Production and Management Engineering*
- Obtained funding [??] to establish the *Dynamic Systems and Simulation Laboratory* and served as its founding director
- Taught courses on stochastic models in production management, stochastic processes, statistics, reliability, dynamic programming, linear programming
- Supervised the Ph.d. thesis of A.N. Burnetas
- Supervised the Master thesis of C. Papachristou

**State University of New York at Stony Brook**, Stony Brook, New York, *Department of Applied Mathematics and Statistics*, Assistant Professor, 9/1981 - 1/1985

- Doctoral student supervision
- Taught classes in optimization, stochastic processes, queueing, dynamic programming.
- Worked with H. Robbins on research sponsored by the AFOSR cf. grant []

#### Activities at Visiting & Short Term Positions

**University of Leiden**, Leiden, The Netherlands, *Mathematisch Instituut*, July 2012, August 2013, October 2014.

- Supervised Master's Thesis of LC Smit
- Member of the Ph.D. committee of D. Ertiningsih
- Worked with F. Speikma, cf. papers [15], [19], [10] and [92]

**National and Kapodistrian University of Athens**, Greece, *Division of Statistics and Operations Research*, 9/1991 - 8/1992 & Fall 1995

- Taught classes in Linear Programming and Dynamic Programming
- Supervised several Master's theses

**Columbia University**, New York, NY, *Department of Statistics*, Summers 1987 & 1988

- Lectured in a class on Sequential Statistics
- Worked with H. Robbins on research sponsored by the AFOSR, under AFOSR-87-0072

**Stanford University**, Stanford, CA Summer 1984 & 1/1985 - 8/1985

- Taught classes in Operations Research Models and Case Studies in Operations Research,
- Worked with C. Derman and A.F. Veinott Jr. cf. papers [56], [57], [58]

**Columbia University**, New York, NY., *Department of Industrial Engineering and Operations Research*, 9/1981 - 5/1982 & 9/1989 - 5/1990

- Taught classes in Linear Programming and Markovian Decision Theory
- Worked with C. Derman on papers [53] and [67]

**Technion**, Haifa, Israel, *School of Management*, January 1994

- Seminar on Sequential Statistics
- Worked with U. G. Rothblum, cf. paper [44] and conference abstracts [97], [100]

#### Industry & Consulting

**Bell Laboratories**, Holmdel, NJ, *Operations Research Center*, Member of Technical Staff, 8/1980 - 9/1981

Worked on projects related to capacity expansion and on a *Dynamic Non-Hierarchical Traffic Routing System*. This system relied on dynamic routing that changed by the time of a day in anticipation of changing traffic

load patterns, and it could significantly reduce the cost of a network that carried intra-metropolitan traffic as compared to the cost of a static hierarchical network

**Brookhaven National Laboratory**, Upton, NY. Department of Nuclear Energy & Department of Applied Mathematics *Consultant*, 8/1983 - 9/1985

*Work involved studies on the reliability of diesel auxiliary power generators of nuclear power stations. Also worked on mathematical reliability problems*

**Athens Airport S.A.**, Spata, Greece Member of the board of Directors, 9/1986 - 5/1987.

Participated on the creation of an evaluation process for bids submitted from bidding groups for the design, construction, operation, maintenance and financing of the new International Airport, and on evaluation of plans for a new highway system

**AM-Gold Products Inc** - Jewelry- Manufacturers, New York, NY. *Consultant*, 10/1995-11/1995

*Advised the management on issues of organizing a \$40,000,000 per year production process: inventory, management, security, quality control, and sales forecasting*

**Neotronics inc**, N. Bellmore, NY. *Vice President*, 8/1995 - 7/2006

*Work involved simulation for research and development specializing in electronic control systems*

**Southern Regional Education Board (SREB)**, NJ. *Consultant*, 11/2011 - 12/2012

*Advised the board in developing a program of study in Global Logistics/Supply Chain Management that begins in high school and connects seamlessly to high-quality postsecondary programs*

**CPR | Strategic Marketing Communications**, NJ. *Consultant*, Summer 2013

*Analyzed advertising and public relations data to determine the demographics associated with the number of impressions of marketing activities*

## Publications

### Refereed Journal Publications

1. Cowan, W. Katehakis MN and SM Ross (2021). 'Halting Multi-Armed Bandits and Single Payout Bandits', *Naval Research Logistics*, to appear.
2. Katehakis MN and S Puranam (2021). 'On the Evaluation of Bidding strategies in Sequential Auctions', *Operations Research Letters*, to appear.
3. Mascarenhas B, Puranam KS and MN Katehakis (2021). 'Comparison of Program-centric vs Student-centric National Resident Matching Algorithms', *Journal of American Medical Association (JAMA) Network Open*; 4(6):e2113769. (DOI): [10.1001/jamanetworkopen.2021.13769](https://doi.org/10.1001/jamanetworkopen.2021.13769).
4. Chang (Aichih) J, Katehakis MN, Shi J and Z Yan (2021). 'Blockchain-Empowered Newsvendor Optimization', *International Journal of Production Economics*, (DOI): [10.1016/j.ijpe.2021.108144](https://doi.org/10.1016/j.ijpe.2021.108144).
5. Amaratunga D, Cabrera J, Ghosh D, Katehakis MN, Wang W, and J Wang (2021). 'Socio-economic impact on COVID-19 cases and deaths and its evolution in New Jersey', *Annals of Operations Research*, (DOI): [10.1007/s10479-021-03941-4](https://doi.org/10.1007/s10479-021-03941-4).
6. Chen W, Katehakis MN and O Kanavetas (2021). 'Ameso Optimization: a Relaxation of Discrete Midpoint Convexity', *Discrete Applied Mathematics*, 293, 177-192, (DOI): [10.1016/j.dam.2020.11.004](https://doi.org/10.1016/j.dam.2020.11.004).
7. Katehakis MN Yang J and T Zhou (2020). 'Dynamic Inventory and Price Controls Involving Unknown Demand on Discrete Nonperishable Items', *Operations Research*, 68(5) 1335-1355 (DOI): [opre.2019.1974](https://doi.org/10.1287/opre.2019.1974).
8. Cowan W and MN Katehakis (2020). 'Exploration - Exploitation Policies with Almost Sure, Arbitrarily Slow Growing Asymptotic Regret', *Probability in the Engineering and Informational Sciences*, 34(3), 406-428, (DOI): [10.1017/S0269964818000529](https://doi.org/10.1017/S0269964818000529).

9. Katehakis MN Smit LC and FM Spieksma (2019). ‘Inversion and Spectral Analysis of Matrices Arising in the Analysis of Markov Processes’, *Annals of Operations Research*, (DOI): [10.1007/s10479-019-03460-3](https://doi.org/10.1007/s10479-019-03460-3).
10. Ertiningsih D. Katehakis MN Smit LC and FM Spieksma (2019). ‘Level product form QSF processes and an analysis of queues with Coxian inter-arrival distribution’, *Naval Research Logistics*, 66(1): 57-72, (DOI): [10.1002/nav.21663](https://doi.org/10.1002/nav.21663).
11. Katehakis MN, Liu Y and J Yang J (2019). ‘A revisit to the markup practice of irreversible dynamic pricing’, *Annals of Operations Research*, 1-29 .
12. Cowan W, Honda J and MN 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](https://arxiv.org/abs/1504.05823), *Journal of Machine Learning Research (JMLR)* 18(154), 1-28.
13. Burnetas A, Kanavetas O and MN Katehakis (2017). ‘Asymptotically Optimal Multi-Armed Bandit Policies under a Cost Constraint’, *Probability in the Engineering and Informational Sciences*, 31 (3), 284-310
14. Katehakis MN, Melamed Band 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](https://doi.org/10.1111/poms.1257).
15. Katehakis MN Smit LC and FM Spieksma (2016). ‘A Comparative Analysis of the Successive Lumping and the Lattice Path Counting Algorithms’, *Journal of Applied Probability*, 53(1): 106-120.
16. Chen W, Fleischhacker A and MN Katehakis (2015). ‘Dynamic Pricing and Inventory Control in a Dual Market Environment’, *Naval Research Logistics*, 62(7): 531-549, (DOI): [10.1002/nav.21663](https://doi.org/10.1002/nav.21663).
17. Katehakis MN Melamed Band 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](https://doi.org/10.1007/s10479-015-1998-y).
18. Cowan W and MN 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
19. Katehakis MN Smit LC and FM 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
20. Puranam KS and MN Katehakis (2014). ‘On Optimizing Taboo Criteria in Markov Decision Processes’, *International Journal of Applied Decision Sciences*, 7(1): 33-43.
21. Puranam KS and MN Katehakis (2014). ‘On Optimal Bidding and Inventory Control in Sequential Procurement Auctions: The Multi Period Case’, *Annals of Operations Research*, 217: 447-462.
22. Shi, J. Katehakis MN Melamed Band Y. Xia (2014). ‘Optimal Replenishment Rate for Inventory Systems with Compound Poisson Demands and Lost-Sales under Discounting’, *Operations Research*, 6 (5): 1048 - 1063.
23. Shi J, Katehakis MN and B Melamed (2013) ‘Pricing the Penalty Function for Inventory Overage and Underage via Martingale Methods’, *Annals of Operations Research*, 208(1): 593-612.
24. Katehakis MN, Ross SM 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 MN Ross SM and J. Yang (Eds.) *Annals of Operations Research*, 208(1): 5-26.
25. Tavana M, Zandi F and MN Katehakis (2013). ‘A Hybrid Fuzzy Group ANP-TOPSIS Framework for E-government Readiness Assessment from a CiRM Perspective’, *Information & Management*, 50: 383 - 397.
26. Katehakis M.N and KS Puranam (2012). ‘On Optimal Bidding in Sequential Procurement Auctions’,

*Operations Research Letters*, 40(4): 223-306.

27. Katehakis M.N and LC 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
28. Katehakis MN and LC 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.
29. Katehakis M.N and KS Puranam (2012). ‘On Bidding for a Fixed Number of Items in a Sequence of Auctions’, *European Journal of Operations Research*, 222(1): 76-84.
30. Zhou B, Katehakis MN and Y Zhao (2009). ‘Stochastic inventory Systems With Free Shipping Options’, *European Journal of Operations Research*, 196(1): 186-197.
31. Ungureanu V, Melamed B and MN Katehakis (2008). ‘Effective Load Balancing for Cluster-based Servers Employing Job Preemption’, *Journal of Performance Evaluation*, 65(8) 606-622.
32. Zhao Y, Zhou B, and MN 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.
33. Bradford PG and MN Katehakis (2007). ‘Insight into Combinatorial Expanders’ , *SIAM Journal on Computing*, 37(1): 83-111.
34. Bradford PG and MN Katehakis (2007). ‘Constrained Inventory Allocation and its Applications’, *WSEAS Transactions on Mathematics*, 6(2): 263-270.
35. Katehakis MN and KS Puranam (2007). ‘On Optimal Replacement Under Semi-Markov Conditions’, ‘WSEAS Transactions on Mathematics’, 6(3): 330-334.
36. Ungureanu V, Melamed B Katehakis MN and PG Bradford (2006). ‘Deferred Assignment Scheduling in Cluster-Based Servers’ *Cluster Computing* 9(1): 57-65.
37. Zhao, Y. and MN 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.
38. Ungureanu V, Melamed Band MN 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.*
39. Burnetas A.N. and MN Katehakis (2003). ‘Asymptotic Bayes Analysis for the Finite Horizon One Armed Bandit Problem’, *Probability in the Engineering and Information Sciences*, 17 (1): 53-82.
40. Gursoy K and MN 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.
41. Burnetas AN, and MN Katehakis (1998) ‘Dynamic Allocation Policies for the Finite Horizon One Armed Bandit problem’, *Stochastic Analysis and Applications*, 16(1): 845-859.
42. Burnetas AN, and MN Katehakis (1997). ‘On Confidence Intervals from Simulation of Finite Markov Chains’, *Mathem. Meth. Operat. Res. (ZOR)*, 47 (3): 241-250.
43. Burnetas, AN and MN Katehakis (1997). ‘Optimal Adaptive Policies for Markovian Decision Processes’, *Mathematics of Operations Research*, 22(1): 222-255.
44. Katehakis MN and UG Rothblum (1996). ‘Sensitive optimal policies for the discounted multi-armed bandit problem’, *Annals of Applied Probability*, 6(3): 1024-1034.
45. Burnetas AN, and MN Katehakis (1996). ‘Optimal Adaptive policies for sequential allocation problems’, *Advances in Applied Mathematics*, 17: 122-142.

46. Burnetas AN, and MN Katehakis (1996) 'On large deviation properties for sequential allocation problems', *Stochastic Analysis and Applications*, 14(1): 13-31.
47. Katehakis MN and HE Robbins (1995). 'Sequential choice from several populations', *Proceedings of the National Academy of Sciences USA*, 92: 8584 -8565.
48. Burnetas AN and MN Katehakis (1995). 'Computing optimal policies for Markovian decision processes using simulation', *Probability in the Engineering and Information Sciences*, 9: 525-537.
49. Katehakis MN and C Melolidakis (1994). 'On The Optimal Maintenance of Systems and Control of Arrivals in Queues', *Stochastic Analysis and Applications*, 8 (2): 12-25.
50. Burnetas AN and MN 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.
51. Govindarajulu Z and MN Katehakis (1991). 'Dynamic Allocation in Survey Sampling', *American Journal of Mathematical and Management Sciences*, 8, 1-14.  
★ Winner of the 1992 Jacob Wolfowitz Prize
52. Katehakis MN and C Melolidakis (1990). 'On Stochastic Optimality of Policies in First Passage problems', *Stochastic Analysis and Applications*, 8 (2): 12-25.
53. Katehakis MN and C Derman (1989). 'On The Maintenance of Systems Composed of Highly Reliable Components', *Management Science*, 6 (5): 16-28.
54. Katehakis MN 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.
55. Johri P and MN Katehakis (1988). 'Scheduling Service in Tandem Queues Attended by a Single Server', *Stochastic Analysis and Applications*, 6 (3): 279-288.
56. Katehakis MN and AF Veinott Jr. (1987). 'The Multi-Armed Bandit Problem: Decomposition and Computation', *Mathematics of Operations Research*, 22 (2): 262-268.
57. Katehakis MN and C Derman (1987). 'Optimal Repair Allocation in a Series System, Expected Discounted Operation Time Criterion', *Stochastic Analysis and Applications*, 5 (4): 387-394.
58. Katehakis MN 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.
59. Chen, YR and MN Katehakis (1986). 'Linear Programming for Finite State Multi - Armed Bandit Problems', *Mathematics of Operations Research*, 11 (1): 180-183.
60. Durinovic S, Lee Y, Katehakis MN and J Fillar (1986). 'Multi objective Markov Decision Processes with Average Cost Criteria', *Large Scale Systems*, 10, 215-226 .
61. Katehakis MN and A Levine (1986). 'Allocation of Distinguishable Servers', *Computers and Operations Research*, 13 (1): 85-93.
62. Katehakis MN and A Levine (1986). 'A Dynamic Routing Problem - Numerical Procedures for Light Traffic Conditions', *Applied Mathematics and Computation*, 17 (3): 267-276.
63. Katehakis MN (1985). 'A Note on the Hypercube Model', *Operations Research Letters*, 3 (6): 319-322.
64. Johri P and MN Katehakis (1985). 'Further Insight into the Structure of the Bold and Timid Policies', *Advances in Applied. Probability*, 17 (2): 298-307.
65. Beltrami E, Durinovic S. and MN Katehakis (1985). 'Multi objective Markov Decisions in Urban Modelling', *Mathematical Modeling*, 6, 333-338.
66. Katehakis MN 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.



67. Katehakis MN and C Derman (1984). 'Optimal Repair Allocation in a Series System', *Mathematics of Operations Research*, 9 (4): 615-623.

#### Refereed Conference Proceedings

68. Cowan W, Katehakis MN and D Pirutinsky (2020). Reinforcement Learning: a Comparison of UCB Versus Alternative Adaptive Policies *Proceedings of the First Congress of Greek Mathematicians (2018)*, Walter de Gruyter GmbH & Co KG.
69. Bardis N, Ekonomou, Borne, Ntalianis, Mercorelli, Katehakis MN Kintzios N. (2020). Business and Economics: Metrics and Peer Review in the journal: 'WSEAS Transactions on Business and Economics; *Proceedings of the International Conference on Mathematical Models & Computational Techniques in Science & Engineering*, London, UK, 2020
70. Katehakis MN and KS Puranam (2015). 'On Optimal Bidding in Internet Concurrent Auctions', *Proceedings of the 6th European Conference on Applied Mathematics and Informatics*, 35-40.
71. Katehakis MN (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.
72. Katehakis MN 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.
73. Katehakis MN 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.
74. Katehakis MN and KS Puranam (2006). 'A Note on the Optimal Replacement Problem', *Proceedings of the 10th WSEAS International Conference on Applied Mathematics*, 498-500.
75. Bradford PG and MN Katehakis (2006). 'Constrained Inventory Allocation', *Proceedings of the 10th WSEAS International Conference on Applied Mathematics*, 504 - 507.
76. Ungureanu V, Melamed B and MN 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.
77. Ungureanu V, Melamed B and MN Katehakis (2004). 'The LC\* Assignment Policy for Cluster-Based Servers', *IEEE International Symposium on Network Computing and Applications*, Cambridge, MA, pp. 177-184.
78. Ungureanu V, Melamed B, Bradford PG and MN 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.
79. Ungureanu V, Melamed B and MN Katehakis (2004). 'Performance Comparison of Size-based Scheduling Policies in Clustered Web Servers', *Proc. IADIS International Conference on Applied Computing, I11-I17*.
80. Ungureanu V, Melamed B and MN Katehakis (2003). 'Towards an Efficient Cluster-based E-Commerce Server', *Proc. IEEE Conference on Cluster Computing*, CLUSTER 03, Hong Kong, China, 474-477.
81. Dinopoulou VD, Katehakis MN 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.
82. Burnetas AN, and MN Katehakis (1995). 'Efficient Estimation and Control for Markov Processes', *Proceedings of the 34-th IEEE Conference on Decision and Control*, 1402-1407.
83. Katehakis MN 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 and Articles under Review

84. Cowan W, Katehakis MN and D. Pirutinsky (2019). ‘Accelerating the Computation of UCB and Related Indices for Reinforcement Learning’, *arXiv preprint arXiv:1909.06019 [cs.LG, stat.ML]*, *under review*
85. Burnetas AN, Kanavetas O and MN Katehakis (2019). ‘Optimal Data Driven Resource Allocation under Multi-Armed Bandit Observations’, *arXiv preprint arXiv:1811.12852 [cs.LG, stat.ML]*, *under review*
86. Katehakis MN, Yang J. and T Zhou (2018). ‘Dynamic Inventory and Price Controls Involving Unknown Demand on Discrete Nonperishable Items’.
87. Cowan W and MN Katehakis (2015). ‘Asymptotically Optimal Sequential Experimentation Under Generalized Ranking’, *arXiv preprint arXiv:1510.02041 [stat.ML]*
88. Cowan, W and MN Katehakis (2015). ‘An Asymptotically Optimal Policy for Uniform Bandits of Unknown Support’, *arXiv preprint arXiv:1505.01918 [stat.ML]*, *under review*
89. Burnetas AN and O. A. Kanavetas (2018). ‘Asymptotically Optimal Sequential Experimentation Under Side Constraints’. *arXiv preprint arXiv:1505.01918 [stat.ML]*, *under review*
90. Govindaraj S, Katehakis MN and N Varzгани (2015). ‘Valuation of Tax Loss Carry-forwards and Carry-backs, and its Implications for Dynamic Portfolio Selection’, *under revision*.

#### Technical Reports or Articles in Preparation

91. Katehakis MN Ross SM and FM Spieksma (2018). ‘Non-Parametric Up-And-Down Experimentation Revisited’
92. Katehakis MN and FM Spieksma (2018). ‘On The Average Cost Optimality Equations for MDPs’
93. Katehakis, MN Smit, L. and FM Spieksma (2018). ‘On the Solution to a Possibly Countable System of Equations Arising in Stochastic Processes’.
94. Cowan, W. and MN Katehakis (2018). ‘Asymptotically Optimal Sequential Experimentation Under Generalized Ranking’.

#### Other Publications

95. Katehakis M.N (2018). Introduction to Uriel G. Rothblum memorial volume, *Naval Research Logistics (NRL)*, 66(1) 3-3.
96. Katehakis M.N (2018). Introduction to Pete Veinott memorial volume, *Naval Research Logistics (NRL)*, 65(8) 3-3.
97. Katehakis M.N, Ross SM 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
98. Katehakis M.N, Ross SM 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

99. Katehakis MN Ross SM and FM Spieksma (eds) (2020). *Analytic Methods in Health Care*, Lee Papayanopoulos Memorial Volume, *Probability in the Engineering and Informational Sciences*, Cambridge University Press UK.
100. Federgruen A. Katehakis M. N. and Spieksma FM and Y. Ye (eds) (2019). *Stochastic Methods in Information*

*Technology*, Uriel G. Rothblum Memorial Volume, *Naval Research Logistics (NRL)*, Vol 66 , No 1, Wiley NY.

101. Federgruen A. Katehakis M. N. and Spieksma FM (eds) (2018). *Stochastic Methods in Information Technology*, Special Issue: Pete Veinott Memorial Volume, *Naval Research Logistics (NRL)*, Vol 65 , No 8, Wiley NY.
102. Katehakis M. N. Ross SM 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.
103. Mastorakis MN and MN Katehakis (eds) (2015). ‘*Mathematical Methods and Systems in Science and Engineering*’. ISBN: 978-1-61804-281-1, WSEAS Press, p.p. 300.
104. Mastorakis MN Pardalos M.P. and MN 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.
105. Katehakis M. N. Ross SM 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.
106. Katehakis MN 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.
107. Katehakis MN 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.
108. Robbins, HE and MN Katehakis (1988). ‘*Studies in Reliability and Inference*’. Defense Technical Information Center.
109. Katehakis M. N. (1987). ‘*Notes on Dynamic Programming*’, Technical University of Crete. 260 p.p..
110. Katehakis MN Kuo L. and Robbins H. E. (1984). ‘*Optimal Maintenance and Inference in Reliability*’. Defense Technical Information Center.
111. Katehakis M. N. (1980). ‘*On the Optimal Maintenance of Reliability Systems*’, Ph.D. Thesis, Columbia University, NY.

#### Forthcoming

112. Feinberg E, Kaspi H. Katehakis MN and FM Spieksma. ‘*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.
113. Kapodistria S. Katehakis MN Ross SM and Lewis M.E. . ‘*Stochastic Models and Algorithms*’ Special Volume In Honor of Professor Eugene A. Feinberg on his 60th birthday, *Annals of Operations Research*, Springer NY, forthcoming.

## Conference Abstracts

### Partial List<sup>2</sup>

1. Burnetas A.N. Kanavetas O. and MN Katehakis (2021). ‘*Asymptotically optimal control for Markov Decision Processes (MDP) under side constraints*’, 31st European Conference on Operational Research (Euro2021)

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<sup>2</sup>List is not complete for years prior to 1991

2. Katehakis MN Temayrian E. and J. Yang (2021). ‘Discrete-item Inventory Control involving Fixed Setup Costs, Demand Censoring, and Unknown Distribution’, EURO 2021
3. Davoodi M. Katehakis MN E. and J. Yang (2021). ‘Dynamic Inventory Control with Fixed Setup Costs and Unknown Discrete Demand Distribution’, EURO 2021
4. Katehakis MN and S. Puranum (2021). ‘Investigation of MDP Models for Sequential Procurement Auctions’, EURO 2021
5. Katehakis et al (2021). ‘Models and Problems in Matching Markets’, EURO 2021
6. Katehakis et al (2021). ‘Forecasting daily confirmed cases and deaths of COVID-19 using a novel dynamic pattern extraction and matching algorithms’, EURO 2021
7. Katehakis et al (2021). ‘The impact of socio-economic factors on the spread of COVID-19 cases and deaths’, EURO 2021
8. Katehakis et al (2021). ‘Adaptive learning models and techniques for forecasting COVID-19 daily cases and deaths’, EURO 2021
9. Katehakis et al (2021). ‘A comparison of multiple forecasting methods for the daily cases and deaths of Covid-19’, EURO 2021
10. Spieksma FM Ross SM and MN Katehakis (2019), ‘Non-parametric Up-and-down Experimentation Revisited’, INFORMS 2019, Seattle WA
11. Ghosh D, Pirutinsky D. Katehakis MN Kanavetas O. and S. Papadimitriou (2019). ‘New Reinforcement Learning Models and Algorithms for Healthcare Treatment Choices’, INFORMS 2019, Seattle WA
12. Shi J. Katehakis MN and J. Chang (2019). ‘Inventory Management Enabled with Blockchain System’, INFORMS 2019, Seattle WA
13. Davoodi M. Katehakis MN and J. Yang (2019). ‘Dynamic Inventory Control with Fixed Setup Costs and Unknown Discrete Demand Distribution’, INFORMS 2019, Seattle WA
14. Pirutinsky D. Cowan W, and MN Katehakis (2019). ‘A Comparison Reinforcement Learning Algorithms’, INFORMS 2019, Seattle WA
15. Puranam K. Katehakis MN and Mascarenhas B. (2019). ‘Algorithm Bias - The Case of Medical Resident Matching’, INFORMS 2019, Seattle WA
16. Burnetas, A. Kanavetas, O. and MN Katehakis (2019). ‘Asymptotically optimal control for Markov Decision Processes (MDP) under side constraints’. *INFORMS Applied Probability Society Conference 2019 (APS)*. July 2019, Brisbane, Australia
17. Cowan, W.; Ghosh, D. Kanavetas, O. Katehakis, M. Papadimitriou, S. and D. Pirutinsky (2019). ‘On Adaptive Control for Continuous-Time Markov Decision Processes’, *INFORMS Applied Probability Society Conference 2019 (APS)*. July 2019, Brisbane, Australia
18. Katehakis MN Cowan W, and D. Pirutinsky (2018). ‘Reinforcement Learning: Connections Between MDPS and MAB Problems’ 18th Applied Stochastic Models and Data Analysis International Conference ASMDA 2019, Florence Italy
19. Chang-Shi J, Katehakis MN and J Shi (2019). ‘Inventory Management for a Blockchain System’, POMS 2019, Washington DC
20. Katehakis MN Melamed B Chang-Shi J, and J Shi (2019). ‘Blockchain Design for Supply Chain Management’, POMS 2019, Washington DC
21. Spieksma FM Ross SM and MN Katehakis (2018). ‘Non-parametric Up-and-down Experimentation Revisited’, INFORMS 2018, Phoenix AZ
22. Spieksma F. Katehakis MN and S. M. Ross (2018). ‘Non-parametric Up-and-down Experimentation

- Revisited', *INFORMS Annual Meeting*, Phoenix AZ
23. Burnetas A. Kanavetas O and MN Katehakis (2018). 'Asymptotically Optimal Multi-armed Bandit Policies Under Side Constraints', *INFORMS Annual Meeting*, Phoenix AZ
  24. Katehakis MN and K. Puranam (2017). 'Bidding and Learning in Repeated Auctions', *INFORMS Annual Meeting, INFORMS Annual Meeting*, Phoenix AZ
  25. Katehakis MN Yang, J. and T. Zhou (2017). *INFORMS Annual Meeting*, 'Dynamic Inventory and Price Controls Involving Unknown Demand', Houston, TX
  26. Varzгани N. MN Katehakis (2017). 'Dynamic Optimization Models for Sourcing Problems', *INFORMS Annual Meeting*, Houston, TX
  27. Katehakis MN and K. Puranam (2017). 'Bidding and Learning in Repeated Auctions', *INFORMS Annual Meeting*, Houston, TX
  28. Cowan W, and MN Katehakis (2017). 'Optimal Data Driven Policies for MDPs', *INFORMS Applied Probability Society Conference 2017 (APS). Kellogg School of Management & the McCormick School of Engineering*, Evanston IL
  29. Wesley Cowan and MN Katehakis (2016). *INFORMS Annual Meeting*, 'Simple Adaptive Policies for MDP's', Nashville TN
  30. MN Katehakis, J. Yang and T. Zhou (2016). *INFORMS Annual Meeting*, 'Dynamic Inventory and Price Control in the Face of Unknown Demand', Nashville TN
  31. K. Puranam and MN Katehakis (2016). *INFORMS Annual Meeting*, 'Bidding With Learning In Repeated Auctions', Nashville TN
  32. Cowan W, and MN Katehakis (2016). 'Adaptive Policies for Markov Decision Processes', *International Workshop on Applied Probability (IWAP 2016)*, Toronto, CAN
  33. Cowan W, and MN Katehakis (2016). 'A Survey of Recent Advances in Sequential Allocation Problems', *International Workshop on Applied Probability (IWAP 2016)*, Toronto, CAN
  34. Shi, J. Katehakis MN and B Melamed (2016). 'On Cash-Flow Based Dynamic Inventory Management', *27th Annual POMS Conference*, Orlando, FL
  35. Cowan W, and MN Katehakis (2015). 'Models And Problems of Dynamic Pricing In The Multi-armed Bandit Framework', *INFORMS Annual Meeting*, Philadelphia, PA
  36. Smit L. Katehakis MN and FM Spieksma (2015). 'Efficient Markov models for dynamic pricing problems', *INFORMS Annual Meeting*, San Fransisco, CA
  37. Varzгани N, Govindaraj S. and MN Katehakis (2015). 'Optimization of maintenance policy in the presence of competing risks', *2012 DSI Annual Meeting*, Seattle WA
  38. Katehakis MN and K. Puranam (2015). 'Optimal Bidding for Bundles in Sequential Auctions', *INFORMS Annual Meeting*, Philadelphia, PA
  39. Gursoy, K. and MN Katehakis (2015). 'On Maximizing the Availability of Systems Composed of Repairable Components', *18th INFORMS Applied Probability Society Conference* Istanbul, Turkey
  40. Zhou T. , Katehakis MN and J. Yang (2014). 'Nonperishable Inventory Control when Demand is Unknown', *INFORMS Annual Meeting*, San Fransisco, CA
  41. Cowan W, and MN Katehakis (2014). 'On Single Payout Multi-armed Bandits and the Secretary Problem', *INFORMS Annual Meeting*, San Fransisco, CA
  42. Smit L. Katehakis MN and FM Spieksma (2014). 'DES and RES Processes and their Explicit Solutions', *INFORMS Annual Meeting*, San Fransisco, CA
  43. Smit L. Katehakis MN and FM Spieksma (2014). 'DES and RES Processes and their Explicit Solutions',

*INFORMS Annual Meeting*, San Francisco, CA

44. Varzgani N, Govindaraj S. and MN Katehakis (2014). ‘Dynamic Models Valuation and Utilization of Tax Loss Carry-forwards and Carry-backs’, *INFORMS Annual Meeting*, San Francisco, CA
45. Katehakis MN and K. Puranam (2014). ‘Adaptive Bidding in Repeated Auctions’, *INFORMS Annual Meeting*, San Francisco, CA
46. Varzgani N. Govindaraj S. and MN Katehakis (2014). ‘On Optimal Tax Planning and Inventory Systems with Perishable Items’, *20th Conference of the International Federation of Operational Research Societies*, Barcelona Spain
47. Smit L. Katehakis MN FM Spieksma and D. Ertiningsih (2014). ‘A Tractable Inventory Model with Random Lead Times’, *International Federation of Operational Research Societies*, Barcelona Spain
48. Smit L. Katehakis MN and FM Spieksma (2014). ‘On Successive Thinning and Lumping of Markov Processes’, *Euro Working Group on Stochastic Modelling (Stochmod 2014)*, Mannheim, Germany.
49. Katehakis MN (2014). ‘Bayesian non-parametric up and down experimentation revisited’, *International Workshop on Applied Probability (IWAP 2014)*, Antalya, Turkey
50. Cowan W, and MN Katehakis (2014). ‘Multi-armed Bandits under General Depreciation and Commitment’, *Third Rutgers Applied Probability Conference*, June 2014
51. Ross SM and MN Katehakis (2014). ‘Design and Estimation Procedures for Ordered Binomial Parameters’, *Third Rutgers Applied Probability Conference*, June 2014
52. Cowan W, and MN Katehakis (2014). ‘Multi-armed Bandits under General Depreciation and Commitment’, *Third Rutgers Applied Probability Conference*, June 2014
53. Burnetas A. and MN Katehakis (2014). ‘Adaptive Sampling Policies under Incomplete Information and Non - Stationary Distributions’ *Third Rutgers Applied Probability Conference*, June 2014
54. Katehakis MN (2013). ‘The Multi Armed Bandit Problem: A survey and Recent Advances’, *Second Rutgers Applied Probability Conference*, December 2013
55. Puranam K. and MN Katehakis (2013). ‘Problems and Models for Repeated Auctions’, *INFORMS Annual Meeting*, Minneapolis, MN
56. Smit LC Katehakis MN and FM Spieksma (2013). ‘Explicit Solutions and Other Properties of Successively Lumpable Quasi Skip Free Processes’, *INFORMS Annual Meeting*, Minneapolis, MN
57. Sonin I. and MN Katehakis (2013). ‘A Markov Chain Modulated Inventory Model’, *INFORMS Annual Meeting*, Minneapolis, MN
58. Cowan W, and MN Katehakis (2013). ‘The Multi-armed Bandit Problem with Commitments: Generalized Depreciation and Necessity of Restart Indices’, *INFORMS Annual Meeting*, Minneapolis, MN
59. Varzgani N. Govindaraj S. and MN Katehakis (2013). ‘A Valuation Model for Tax Loss Carryforwards and Carrybacks’, *INFORMS Annual Meeting*, Minneapolis, MN
60. Shi, J. Katehakis MN and B. Melamed. ‘Cash-Flow Based Dynamic Inventory Management’, *EURO-INFORMS 2013: Joint International Meeting, 26th European Conference on Operational Research*, Rome, July 2013, Rome, Italy
61. Burnetas A.N. and MN Katehakis (2013). ‘On Sequential Allocation in a Changing Environment’, *INFORMS Computing Society Conference*, January 6-8, Santa Fe, NM.
62. Katehakis MN and LC Smit (2013). ‘Successive Lumping for a Class of Markov Chains’, *INFORMS Computing Society Conference*, January 6-8, Santa Fe, NM
63. Chen W, Katehakis MN and A. Fleischhacker (2012). ‘Dynamic Pricing and Inventory Control in a Dual-Market Environment’, *2012 DSI Annual Meeting*, San Francisco CA



64. Shi, J. and MN Katehakis (2012). 'Time-Average Cost Optimization for Production-Inventory Systems with Compound Poisson Demands and Lost-sales', *2012 DSI Annual Meeting*, San Francisco CA
65. Zhou, B. Ji, F. X and MN Katehakis. (2012). 'Advancing the Adoption of Lean in SME's Supply Chains', *2012 DSI Annual Meeting*, San Francisco CA
66. Burnetas, ANand MN Katehakis (2012). 'Optimal Adaptive Policies for Sequential Allocation Problems - Revisited', *INFORMS Annual Meeting*, Phoenix AZ
67. Katehakis MN and LC Smit (2012). 'Applications of Successive Lumping in Optimization of Markov Chains', *INFORMS Annual Meeting*, Phoenix AZ
68. Katehakis MN and KS Puranam (2012). 'Joint Bidding and Pricing Models', *INFORMS Annual Meeting*, Phoenix, AZ
69. Chen, W. Fleischhacker, A. and MN Katehakis (2012). 'Channel Preference and a Dual Channel Retailer: Shaping Demand to Match Constrained Supply', *POMS Annual Meeting*, Chicago IL
70. Katehakis MN and LC Smit. (2011). 'On Optimal Replenishment Policies Under Random Lead Times and Partially Retained Demands', *INFORMS Annual Meeting*, Charlotte NC
71. Katehakis MN and KS Puranam (2011). 'Optimal Biding Under Random Demand', *INFORMS Annual Meeting*, Charlotte NC
72. Katehakis MN and KS Puranam (2010). 'Optimal Bidding in Sequential Auctions with Random External Demand', *INFORMS Annual Meeting*, Austin TX
73. Katehakis MN and KS Puranam (2010). 'Further Insight on Optimizing Taboo Criteria in Markov Decision Processes', *INFORMS Annual Meeting*, Austin TX.
74. Shi, J. Katehakis MN and B Melamed (2010). 'Pricing Overage and Underage Penalties for Inventory with Continuous Replenishment and Compound Renewal Demand via Martingale Methods', *The 10th Annual INFORMS RM and Pricing Section conference* Cornell University, Ithaca, NY, June, 2010.
75. Katehakis MN and KS Puranam (2010). 'Optimizing Taboo criteria in Markov Decision Processes', *2010 DSI Annual Meeting*, San Diego CA
76. Katehakis MN and KS Puranam (2009). 'Optimal Bidding in Finite Horizon Sequential Auctions with Learning', *INFORMS Annual Meeting*, San Diego CA
77. Shi, J, MN Katehakis and B Melamed (2009). 'On Optimal Continuous Replenishment Rates for Stochastic Inventory Systems Under Lost-sales', *INFORMS Annual Meeting*, San Diego CA
78. Katehakis MN and KS Puranam (2009). 'Maximizing Taboo Rewards in Sequential Auctions', *INFORMS Annual Meeting*, San Diego CA
79. Katehakis MN and KS Puranam (2009). 'On Optimizing Taboo Criteria in Markov Decision Processes', *The 15th INFORMS Applied Probability Society Conference*, Cornell University, Ithaca, NY
80. Chen, W. and MN Katehakis (2008). 'A Stochastic Model in Research and Development', *INFORMS Annual Meeting*, Washington DC
81. Zhou, B. Katehakis M.N and H. Zhong (2008). 'The Analysis of Multi-item Systems with Order Incentives', *DSI Annual Meeting*, Baltimore, MD
82. Chen, W. and MN Katehakis (2007). 'Optimal Ordering Policies Under a Fixed Penalty for Shortages', *INFORMS Annual Meeting*, Seattle WA
83. Chen, W. and MN Katehakis (2006). 'Stochastic Models in a International Shipping Environment', *INFORMS Annual Meeting*, Pittsburgh PA
84. Zhou, B. and MN Katehakis (2005). 'New Models for Dynamic Pricing', *INFORMS Annual Meeting*, San Francisco CA



85. Zhao, Y. B. Zhou and MN Katehakis (2005). 'An Efficient Heuristic Policy for Stochastic Inventory Systems with Minimum Order Quantity', *INFORMS Annual Meeting*, San Francisco CA
86. Katehakis, MN and Y. Zhao (2004). 'On the Structure of Optimal Policies for Stochastic Inventory Systems with Minimum Order Quantity', *INFORMS Annual Meeting*, Denver CO, *Special Cluster Honoring A.F. Veinott Jr.*
87. Bradford, P.G. and MN Katehakis (2002). 'Contract Constrained Inventory Allocation', *INFORMS Annual Meeting*, San Jose CA
88. Gursoy, K. and MN Katehakis (2001). 'Models of Repair Allocation in Discrete Time, Asymptotic Analysis', *INFORMS Annual Meeting*, Miami FL
89. Katehakis, MN and A.N. Burnetas (2000). 'Transformations of Constrained Multi-Armed Bandit Problems & Implications', *INFORMS Annual Meeting*, Salt Lake City UT
90. Katehakis MN (1999). 'Models for Adaptive Airline Revenue Management' *INFORMS Annual Meeting*, Philadelphia PA
91. Gursoy, K. and MN Katehakis (1999). 'On Maximizing the Reliability of Two Component Series Systems in Discrete Time', *INFORMS Annual Meeting*, Philadelphia PA
92. Burnetas AN, and MN Katehakis (1998). 'Sequential Allocation Problems with Side Constraints', *INFORMS Annual Meeting*, Seattle WA
93. Burnetas AN, and MN Katehakis (1998). 'Adaptive Control of Queueing Systems Under Incomplete Information', *INFORMS Annual Meeting*, Washington DC
94. Herschkorn, S. and MN Katehakis (1997). 'Inspection Policies for Highly Reliable Systems', *INFORMS Annual Meeting*, Dallas TX
95. Burnetas AN, and MN Katehakis (1997). 'Optimal Maintenance Policies Under Incomplete Information', *INFORMS Annual Meeting*, Dallas TX
96. Katehakis MN (1997). 'Remarks on sequential allocation', *second World Congress of Nonlinear Analysis*, Athens, Greece
97. Katehakis M. N. and U.G. Rothblum, (1996). 'Multi-Armed Bandit Problems: Sensitive-Optimality Criteria', *Applied Probability Conference*, Atlanta, GA
98. Burnetas AN, and MN Katehakis (1996). 'Adaptive MDP Pricing Models', *INFORMS Annual Meeting*, Washington DC
99. Burnetas AN, and MN Katehakis (1996). 'Adaptive Control of Queueing Systems Under Incomplete Information', *INFORMS Annual Meeting*, Washington DC
100. Katehakis MN and U.G. Rothblum, (1995). 'Multi-Armed Bandit Problems with Sensitive-Discount, Average-Reward- and Average-Overtaking-Optimality' *TIMS SINGAPORE*, Singapore.
101. Burnetas AN, and MN Katehakis (1994). 'Fast-Convergent Adaptive Policies for Constrained Markovian Decision Processes Under Partial Information', *ORSA/TIMS Joint National Meeting*, Detroit MI
102. Katehakis MN (1993). 'Scaling MDP Problems', *ORSA/TIMS*, Phoenix AZ
103. Burnetas AN, and MN Katehakis (1993). 'On Estimation of Expected Passage Times - Rewards and Average Rewards for Finite State Markov Chain', *ORSA/TIMS Joint National Meeting*, Chicago IL.
104. Burnetas AN, and MN Katehakis (1993). 'Further Results on Asymptotically Efficient Adaptive Policies for Markovian Decision Processes', *ORSA/TIMS Joint National Meeting*, Phoenix AZ
105. Burnetas AN, and MN Katehakis (1992). 'On Finding Optimal Policies for MDP's under Incomplete Information', *ORSA/TIMS Joint National Meeting*, Orlando FL
106. Burnetas AN, and MN Katehakis (1991). 'On Finding Optimal Policies of MDP's with Simulation',

*ORSA/TIMS Joint National Meeting, Anaheim CA*

107. Katehakis MN and C. Melolidakis (1991). 'On the Optimal Maintenance of Systems and Control of Arrivals in Queues', *ORSA/TIMS Joint National Meeting*, Nashville TN
108. Burnetas AN, and MN Katehakis (1991). 'On Optimal Allocation Policies for the One Armed Bandit Problem', *ORSA/TIMS Joint National Meeting*, Nashville TN
109. Katehakis MN and C. Melolidakis (1988). 'Dynamic Repair Allocation for a K out of N system', *ORSA/TIMS Joint National Meeting*, Washington DC
110. Katehakis MN and A.F. Veinott Jr. (1985). 'On Computing the Gittins DAI Index', TIMS/ORSA, Boston, MA
111. Katehakis M.N and Y.R. Chen (1984). 'Scheduling in a Two Stage Multiprocessor System', *ORSA/TIMS Joint National Meeting*, San Fransisco Ca
112. Katehakis M.N and A. Levine (1983). 'On the Optimal Operation of a Emergency Services - Heavy and Light Traffic Results', *ORSA/TIMS Joint National Meeting*, Chicago IL
113. Katehakis M.N (1983). 'On the Optimal Maintenance of a Series System with Dependent Components', *ORSA/TIMS Joint National Meeting*, Chicago IL
114. Katehakis M.N and P.K. Johri (1982). 'Optimal Repair Allocation in a Series System', *ORSA/TIMS Joint National Meeting*, San Diego CA
115. Derman C. and MN Katehakis (1981). 'Optimal Repair Allocation in a Series System', *CORS/ORSA/TIMS Joint Meeting*, Toronto, CAN

## Selected Special Lectures

1. **(Invited)** 'Reinforcement Learning - Methods and Applications in Finance'. Bank of Greece, November 2019, Athens Greece
2. **(Plenary)** 'Reinforcement Learning Algorithms: Rates of learning versus computation complexity', *The 8-th South East Asian Mathematical Society International Conference SEAMS-UGT*, July 2019, Yogyakarta, Indonesia
3. **(Invited)** 'On Adaptive Control for Continuous-Time Markov Decision Processes', *INFORMS Applied Probability Society Conference 2019 (APS)*. July 2019, Brisbane, Australia
4. **(Plenary)** 'Reinforcement Learning: Connections between MDPs and MAB Problems', 18th Applied Stochastic Models and Data Analysis International Conference ASMDA 2019, Florence Italy
5. **(Invited)** 'Inventory Management for a Blockchain System', POMS 2019, Washington DC **(Invited)** 'Blockchain Design for Supply Chain Management', POMS 2019, Washington DC
6. **(Plenary)** First Congress of Greek Mathematicians (2018) Hellenic Mathematical Society, Athens, Greece
7. **(Invited)** AMS Spring Eastern Sectional Meeting 2018 'Reinforcement Learning: Connections between MDPs and MAB Problems' Boston, MA
8. **(Plenary)** Stern School of Business, New York University (2018). 'Reinforcement Learning: Connections Between MDPs and MAB Problems', 2018 NYC OPERATIONS DAY, March 2.
9. **(Invited)** Eindhoven University of Technology, Netherlands (2016). 'Simple Data Driven Policies for MDPs', Workshop Data-Driven Operations Management, October 24.
10. **(Invited)** University of Osnabrueck, Germany (2016). 'Simple Data Driven Policies for MDPs', Workshop in honor of Wolfgang Stadje, October 21
11. **(Invited)** InfoSymbiotics/DDDAS Conference (2016). 'New Bandit and MDP Models that Provide Optimal DDDA Methods', Hartford, CT, Aug 9-12

12. **(Invited)** IWAP-2016, 20-23 June, 2016, Toronto, Canada. *The ninth International Workshop on Applied Probability*, ‘Recent Advances in Sequential Allocation Problems’
13. **(Invited)** University of Southern California (2016). Viterbi School of Engineering, ‘Sequential Allocation Policies in a Changing Environment’, January 20.
14. **(Invited)** Lancaster University, Lancaster UK, School of Management (2016). ‘Optimal Sequential Allocation under Constraints’, January 13.
15. **(Invited)** Lancaster University, Lancaster UK, STOR-i: Statistics and Operational Research Centre for Doctoral Training in Partnership with Industry, *Multi-armed Bandit Workshop 2016*, ‘Asymptotically Optimal Policies for Non-Parametric MAB Models under Generalized Ranking’, January 11.
16. **(Invited)** Duke University (2015). *Decision Sciences Seminar Series*, Fuqua School of Business, ‘On Optimal Sequential Allocation under Constraints’, planned for December 14.
17. **(Invited)** INFORMS - Philadelphia (2015). ‘Models And Problems of Dynamic Pricing In The Multi-armed Bandit Framework’
18. **(Invited)** University of Connecticut (2015) *Joint Department of Operations and Information Management and Department of Statistics Seminar*, ‘Short Term Loss and Asymptotically Optimality of Sequential Allocation Policies’
19. **(Invited)** IBM T.J. Watson Research Center (2015). *Mathematical Sciences and Analytics Seminar*, Yorktown Heights, NY, ‘On Asymptotically Optimal Sequential Allocation Policies Under Side Constraints’
20. **(Tutorial)** Koç University, Sarıyer/İstanbul, Turkey (2015). *18th INFORMS Applied Probability Society Conference*, ‘A Tutorial on Multi-Armed Bandit Problems’
21. **(Invited)** Koç University, Sarıyer/İstanbul, Turkey (2015). *18th INFORMS Applied Probability Society Conference*, ‘On the Structure of Average Reward Optimal Policies for Multi-Chain MDPs’
22. **(Plenary)** AMCSE’15, Agios Nikolaos, Greece (2015). *2015 International Conference on Applied Mathematics, Computational Science & Engineering*, ‘Short Term and Asymptotic Properties of Minimal-Exploration Sequential Allocation Rules’
23. **(Plenary)** AMATHI ’15, Tenerife, Spain (2015). *6th European Conference on Applied Mathematics and Informatics*, ‘On Optimal Bidding in Internet Concurrent Auctions’
24. **(Invited)** Columbia University (2015). *Fifth International Workshop in Sequential Methodologies*, ‘On the Short Term and the Asymptotic Behavior of Sequential Allocation Policies’
25. **(Opening Plenary)** University of Crete, Greece (2015). *International Workshop in Memory of Vassilios K. Klonias*, ‘Vassilios K. Klonias his Research and his Teaching Methods’
26. **(Invited)** University of Crete, Greece (2015). *International Workshop in Memory of Vassilios K. Klonias*, ‘Multi-Armed Bandit Problems, Models and Algorithms’
27. **(Invited)** Lehigh University (2015). *Modeling and Optimization: Theory and Applications Conference*. ‘Multi-Armed Bandit Problems, Models and Algorithms’
28. **(Invited)** INFORMS - San Francisco (2014). ‘Adaptive Bidding in Repeated Auctions’
29. **(Invited)** IWAP-2014, Antalya, Turkey (2014). *The seventh International Workshop on Applied Probability*, ‘On Non-Parametric Quantile Estimation’
30. **(Plenary)** Northwestern University (2014). *Center for Engineering and Health*, ‘Multi-Armed Bandits in Healthcare: Adaptive designs, matching, and admission control’
31. **(Plenary)** AEBD’14, Lisbon, Portugal (2014). *The 6th International Conference on Applied Economics, Business and Development*, ‘Multi-Armed Bandits in Healthcare, Machine Learning and Scheduling’
32. **(Invited)** Stony Brook University (2014). *Center for Dynamic Data Analytics Workshop*, ‘Models and Prob-

lems in Sequential Auctions’

33. **(Invited)** IFORS’14, Barcelona Spain (2014). *20th Conference of the International Federation of Operational Research Societies*, ‘A Tractable Inventory Model with Random Lead Times’
34. **(Invited)** IFORS’14, Barcelona Spain (2014). *20th Conference of the International Federation of Operational Research Societies*, ‘On Optimal Tax Planning and Inventory Systems with Perishable Items’
35. **(Discussant)** Technion, Israel (2013). *Operation Research Conference in memory of Professor Uriel G. Rothblum*, [invitation-only conference](#)
36. **(Invited)** University of Haifa, Israel (2013). Statistics Department, ‘Research on Sequential Allocation and State Aggregation’
37. **(Invited)** University of Michigan, Ross School of Business (2013). *Technology & Operations Seminar*: ‘Research on Sequential Allocation and State Aggregation’
38. **(Invited)** EURO-INFORMS Joint International Meeting, 26th European Conference on Operational Research (2013). ‘Cash-Flow Based Dynamic Inventory Management’, Rome, Italy
39. **(Invited)** ICS’13, Santa Fe, NM. (2013). *INFORMS Computing Society Conference*, ‘On Sequential Allocation in a Changing Environment’
40. **(Invited)** ICS’13, Santa Fe, NM. (2013). *INFORMS Computing Society Conference*, ‘Successive Lumping for a Class of Markov Chains’
41. **(Invited)** INFORMS - Minneapolis (2013). ‘A Markov Chain Modulated Inventory Model’
42. **(Invited)** INFORMS NJ - Chapter (2013). ‘Multi Armed Bandit Analytics: A Survey and Recent Advances’
43. **(Invited)** *INFORMS Applied Probability Society Conference*, Costa Rica (2013). ‘Cash-Flow Based Dynamic Inventory Management’
44. **(Invited)** *INFORMS Annual Meeting*, Phoenix AZ (2012). ‘Optimal Adaptive Policies for Sequential Allocation Problems’
45. **(Discussant)** Stanford University (2013). *Operation Research Conference in memory of Professor Arthur F. Veinott, Jr.*, [invitation-only conference](#)
46. **(Invited)** Stevens Institute of Technology, *6th Rutgers-Stevens Workshop on Optimization of Stochastic Systems* (2011). ‘On Sequential Procurement Auctions’
47. **(Discussant)** Stanford University (2011). *Conference to celebrate the contributions of Professors Richard W. Cottle and Arthur F. Veinott, Jr.* [invitation-only conference](#)
48. **(Plenary)** Columbia University (2011). *Center of Applied Probability Conference in Honor and Memory of Professor Cyrus Derman*, ‘Non-Parametric Up-and-Down Experimentation Revisited’, *one of five talks given by M. Brown, M. Katehakis, SM Ross, M. Sobel and A.F. Veinott Jr.* [invitation-only conference](#)
49. CONTROL’08, Corfu Greece (2008). *4th WSEAS/IASME International Conference on Dynamical Systems And Control*, ‘Optimization of the Total Present Value of Profits Under Semi Markov Conditions with Applications in the Optimal Ferry Dispatch Problem’
50. SEPADS’07, Crete, Greece (2007). *6th WSEAS International Conference on Software Engineering, Parallel and Distributed Systems*, ‘Optimal Booking Policies’
51. **(Plenary)** CIMMACS’07, Tenerife Spain (2007). *6th International Conference on Computational Intelligence, Man-Machine Systems and Cybernetics*, ‘The AMESO Class of Optimization Problems and their Applications’
52. **(Invited)** *INFORMS Annual Meeting*, Denver CO (2004). *Special Cluster Honoring A.F. Veinott Jr.* ‘On the Structure of Optimal Policies for Stochastic Inventory Systems with Minimum Order Quantity’<sup>3</sup>

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<sup>3</sup>In my absence due to illness, talk was delivered by my co-author Y. Zhao.

53. **(Invited)** University of Crete, Greece (2002). *Department of Mathematics*, ‘Notable Operations Research Methodologies and their Applications’
54. **(Memorial)** Columbia University (2001). *Memorial Conference for Professor Herbert E. Robbins*, ‘My Memories of Herb and his Contributions to Statistics’
55. **(Invited)** *INFORMS Annual Meeting*, Salt Lake City UT (2000). ‘Transformations of Constrained Multi-Armed Bandit Problems & Implications’
56. **(Invited)** University of Ulm, Germany (1999). *10th Applied Probability Conference*, ‘On Confidence Intervals from Simulation of Finite Markov Chains’
57. **(Invited)** *INFORMS Annual Meeting*, Philadelphia PA(1999). ‘Models for Adaptive Airline Revenue Management’
58. **(Panelist)** *MASCOTS 1997*, IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems, January 12-15, 1997 Haifa, Israel.
59. **(Invited)** *2nd World Congress of Nonlinear Analysis*, Athens, Greece (1997). ‘Remarks on sequential allocation’
60. **(Invited)** Columbia University (1996). Graduate School of Business, ‘Uniformly Fast and Maximal Convergence Rate Adaptive Policies for uMDPs’
61. **(Invited)** *INFORMS Annual Meeting*, Washington DC (1996), ‘Adaptive MDP Pricing Models’
62. **(Invited)** National and Kapodistrian University of Athens, Division of Statistics and Operations Research, Greece (1994). ‘On Sequencing Different Types of Tasks on a Single Processor under Incomplete Information’
63. **(Plenary)** Columbia University (1994). *Special Conference in Honor of Professor Cyrus Derman*, Industrial Engineering and Operations Research Department, ‘Asymptotically Efficient Adaptive Policies for Markovian Decision Processes’, *One of five presentations, other speakers: A.F. Veinott Jr. I. Karatzas, M. Sobel, SM Ross.*
64. **(Invited)** University of Rhode Island (1994). *Department of Computer Science and Statistics*, ‘Dynamic Allocation in Survey Sampling’
65. *ORSA/TIMS Joint National Meeting*, Phoenix AZ (1993). ‘Scaling MDP Problems’
66. **(Invited)** Technion - Israel Institute of Technology, Israel (1992). *Faculty of Management*, ‘A Survey and Recent Advances in Dynamic Allocation Problems’
67. **(Invited)** Hasselt (Limburgs) University, Statistics Department, Belgium (1991). ‘On Stochastic Optimality of Policies in First Passage Problems’
68. **(Invited)** Syracuse University (1989). *Special Conference: Modern Sequential Statistical Analysis in Honor of Professor Herbert Robbins*, ‘Dynamic Allocation in Survey Sampling’
69. **(Invited)** Bilkent University, Turkey (1988). ‘Dynamic Routing Problems - Numerical Procedures’
70. **(Invited)** Columbia University (1988). Mathematical Statistics Department, ‘Problems and Models for Maximizing the Availability of Systems’
71. **(Invited)** Columbia University (1987). Department of Mathematical Statistics. *Mini Conference on ‘Statistical Reliability, Sequential Methods and Related Topics’*, ‘An Optimal Restart Model to Compute the Gittins’ Index’
72. **(Invited)** Columbia University (1986). Mathematical Statistics Department, ‘The Multi-Armed Bandit Problem: Decomposition, Computation and Complexity’
73. **(Invited)** Thomas Jefferson Medical Center (1986). *Department of Radiation Therapy and Nuclear Medicine*, ‘On Optimal Allocation of Patients to Different Treatments’



74. **(Invited)** Brookhaven National Laboratory (1985). *Special IMS Conference in Honor of Professor Herbert Robbins*, ‘On Computing the Gittins Indices for Optimal Allocations in Clinical Trails’
75. **(Invited)** ORSA/TIMS Joint National Meeting, Boston, MA (1985). ‘On Computing the Gittins DAI Index’
76. **(Invited)** Stanford University (1985). *Operations Research Department*, ‘The Multi Armed Bandit Problem, its Solution with the Gittins Indices and their Computation’
77. **(Invited)** Technical University of Crete, Greece (1985). *Production Engineering and Management Department*, ‘Models and Problems of Optimal Maintenance of Systems’
78. **(Invited)** University of California, Santa Barbara (1985). *Statistics Department*, ‘On the Multi Armed Bandit Problem -  $\epsilon$ - optimal policies’
79. **(Invited)** Purdue University (1985). *Statistics Department*, ‘Linear Programming for Finite State Multi Armed Bandit Problems’
80. **(Invited)** Air Force Office of Scientific Research (1985). *Conference on Reliability*, ‘On the Maintenance of Highly Reliable Systems’
81. **(Invited)** Yale University (1984). *Department of Statistics*, ‘On Optimal Allocation in Clinical Trails’
82. **(Invited)** University of Maryland (1984). *Institute for Systems Research*, ‘On Dynamic Allocation Problems and the Gittins Index’
83. **(Invited)** Brookhaven National Laboratory (1984). *Mini Conference on ‘Statistical Reliability’*, ‘Models and Problems of Dynamic Repairman Assignments to Failed Components of a System’
84. **(Invited)** Brookhaven National Laboratory(1983). Nuclear Energy Department, ‘On Computing the Availability of Highly Reliable Systems’
85. **(Invited)** Johns Hopkins University (1983). *Mathematical Sciences Department*, ‘Multi-Objective Markovian Decision Processes with Applications to Urban Planning’
86. **(Invited)** Columbia University (1981). *Industrial Engineering and Operations Research Department*, ‘Optimal Server Allocations in a Series System’
87. **(Invited)** New York University (1981). *Decision and Information Sciences Department*, Stern School of Business ‘On the Optimal Maintenance of Reliability Systems’
88. **(Invited)** Stony Brook University (1981). *Applied Mathematics and Statistics Department* ‘On the Optimal Allocation of Servers in Queues’
89. **(Invited)** Bell Telephone Laboratories (1980). *Operations Research Center*, ‘An Explicit Solution to a Combinatorial Size Dynamic Allocation Problem’
90. **(Invited)** Columbia University (1980). *Mathematical Statistics Department*, ‘Optimal Server Allocation for Highly Reliable Systems’

#### Lectures at Rutgers

91. Rutgers University (2015). *7th Rutgers-Stevens Workshop on Optimization of Stochastic Systems*, ‘Simple Policies with Arbitrarily Slow Growing Regret for Sequential Allocation Problems’
92. Rutgers University (2014). *DIMACS/CCICADA Interdisciplinary Seminar Series*, ‘Solutions to two problems on Bandit Models’
93. Rutgers University (2014). *First Rutgers ECE and MSIS Workshop*, ‘Fast Detection of the Best Treatment and Google Analytics’
94. Rutgers University (2013). *Second Rutgers Applied Probability Conference*, ‘The Multi Armed Bandit Problem: A survey and Recent Advances’



95. Rutgers University (2013). *The Center for Dynamic Data Analytics Fall 2013 Workshop & IAB Meeting*, ‘Multi-Armed Bandit Analytics: A Survey and Recent Advances’
96. Rutgers University (2013). *Newark Chancellor’s Research Day*, ‘Research in the Era of Big-Data Driven Analytics’
97. Rutgers University (2012). *First Rutgers Applied Probability Conference*, ‘The Class of Quasi-Skip Free Processes: Explicit solutions when successively lumpable’
98. Rutgers University (2012). *The 20th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management*, ‘Cash-Flow Based Dynamic Inventory Management’
99. Rutgers University (2011). *RUTCOR Rutgers Center for Operations Research Seminar*, ‘Non-Parametric Up-and-Down Experimentation Revisited’
100. Rutgers University (2011). *DIMACS/CCICADA Workshop*, ‘Non-Parametric Up-and-Down Experimentation Revisited’
101. (**Discussant**) Rutgers University (2011). *NSF Workshop: A Conversation between Computer Science and Operations Research on Stochastic Optimization*, [invitation-only conference](#)
102. Rutgers University (2009). *Management Science & Information Systems Department*, ‘Optimal Bid Strategies in Sequential Auctions’
103. Rutgers University (1994). RUTCOR - Rutgers Center of Operations Research, ‘Problems and Models of Dynamic Service Allocation in Queues’
104. Rutgers University (1987). *Statistics Department*, ‘The Restart Problem and its use to calculate Dynamic Allocation Indices’
105. Rutgers University (1986). RUTCOR - Rutgers Center of Operations Research, ‘On the Optimal Maintenance of Systems and Control of Arrivals in Queues’

## Educational Activities

### Program and Curriculum Development

1. **Created and taught** one of the first courses in Supply Chain Management at Rutgers: 26:711:685: ‘Stochastic Models & Applications in Supply Chains’. This course is a core course in the PhD program of the successful Supply Chain Department, and it has been offered at Rutgers Business School NB undergraduate program since the academic year 2006/2007.
2. **Created** (with Ron Armstrong) in 1997, the core undergraduate course 29:623:311: ‘Production and Operations Management’. I serve as the coordinator of the many (currently 12) sections offered per semester, often teaching a section.
3. **Created** (with Lee Papayanopoulos) in 1997, the core undergraduate course: 29:623:340: ‘Introduction to Business Research Methods’, for the similarly many sections of which Dr. Papayanopoulos served as its coordinator.
4. **Created** several new classes some of which I did not teach including: a) ‘Introduction to Business Analytics’ (with Jonathan Eckstein and Xiadong Lin) an undergraduate course for non Business School majors for the NB campus, b) ‘Dynamic Pricing and Revenue Management’ (with J. Yang) a PhD course, and c) ‘Revenue Management’ (with J. Yang) an MBA elective course.
5. **Restarted** the MSIS department seminar in 2010.
6. **Created**, in 2012, the now world renown **Rutgers Applied Probability Conference Series**.
7. As chair of the MSIS department I lead the efforts of the department to create the following modern degree programs:
  - (a) A new PhD program in Operations Research, offered at Rutgers Business School since the academic

year 2013/2014.

- (b) The Analytics and Information Management MBA concentration, offered at Rutgers Business School MBA program since the academic year 2013/2014.
  - (c) Master of Information Technology MS program, offered at Rutgers Business School MBA program since the academic year 2013/2014. Its modernization in 2013 included adding two new concentrations: ‘Information Assurance’ and ‘Operations Research and Business Analytics’ (in the previously single concentration in ‘Information Systems’ program). This led to significantly increased enrollments (from about 6 students being admitted in 2011, to about 70 in 2015).
  - (d) Establishment of a **new major** in Business Analytics and Information Technology, offered at Rutgers Business School NB undergraduate program since the academic year 2012/2013.
8. Lead the efforts to establish the alumni clubs:
- (a) ‘The Rutgers Business School Management Science and Information Systems Graduate Alumni Network’, for MS. and Ph.D. alumni, in 2012.
  - (b) ‘The Rutgers Business School Management Science and Information Systems Alumni Network’, for the BA and BS alumni, in 2012.

### 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).

### Courses taught at Rutgers

#### Graduate

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

#### Undergraduate

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

### Courses taught at other Universities

#### Graduate

15. Reliability and Maintenance of Systems, Athens University (PhD)
16. Markovian Decision Processes, Columbia University (MS & PhD)

17. Linear Programming, Columbia University and SUNY Stony Brook (MS & PhD)
18. Queuing Theory, SUNY Stony Brook (MS & PhD)
19. Topics in Applied Mathematics, SUNY Stony Brook (PhD)
20. Probability Theory, SUNY Stony Brook (MS & PhD)
21. Non Linear and Dynamic Programming, Athens University (PhD)
22. Applications of Operations Research, Stanford Univ. (MS)

#### Undergraduate

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

#### Doctoral Thesis Supervision

##### Doctoral Students [Work in Progress at Rutgers]

1. Wenting Wang (jointly with J. Cabrera of Statistics department), Dept. of Management Science & Information Systems, Rutgers University
2. Mehdi Davoodi (jointly with J. Yang), Dept. of Supply Chain Management, Rutgers University
3. Ehsan Teymourian (jointly with J. Yang), Dept. of Management Science & Information Systems, Rutgers University

##### Doctoral Students [Completed]

4. Daniel Pirutinsky (jointly with W. Cowan of CS department) Dept. of Management Science & Information Systems, Rutgers University. First Position: [tenure track Assistant Teaching Professor in the Industrial Engineering and Operations Research Department at UC Berkeley](#).
5. Debopriya Ghosh (2020) (jointly with J. Cabrera), Dept. of Management Science & Information Systems, Rutgers University. First Position: [Senior Biostatistician at Johnson & Johnson](#)
6. Aichih Chang (2019) (jointly with B. Melamed), Dept. of Supply Chain Management, Rutgers University. First Position: [tenure track Assistant Professor at the Martin Tuchman School of Management, New Jersey Institute of Technology](#)
7. Nilofar Varzгани (2018). (jointly with S. Govindaraj), Dept. of Management Science & Information Systems, Rutgers University. First Position: [tenure track Assistant professor at Lasalle University, School of Business](#)
8. Tingting Zhou (2018). (jointly with J. Yang), Dept. of Management Science & Information Systems, Rutgers University. First Position: [Visiting Professor School of Business, College of Charleston](#)
9. Wesley Cowan (2016). Dept. Mathematics, New Brunswick, Rutgers University. *Partial support provided by NSF grant: CMMI-14-50743*. First Position: [Assistant Teaching Professor, Department of Computer Science, Rutgers](#)
10. Wajahat Gilani (2016). Dept. of Supply Chain Management, Rutgers University. First Position: [Strike Valuation inc. New York](#)
11. Laurens Smit (2014) (jointly with Flora Spijksma - University of Leiden). ‘On Successive Lumping of Large Scale Systems’, Dept. of Management Science & Information Systems, Rutgers University. First Position: [Assistant Professor University of Leiden](#)
12. Karti S. Puranam (2010). ‘Stochastic Analysis of Bidding in Sequential Auctions and Related Problems’, Dept. of Management Science & Information Systems, Rutgers University. First Position: [Assistant](#)

Professor School of Business Ithaca College

13. 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: [Assistant Professor Georgia State University, Robinson College of Business](#)
14. 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: [Assistant Professor Providence College](#)
15. Bin Zhou (2007). ‘On Optimal Pricing and Ordering in Supply Chain Management’, Dept. of Supply Chain Management and Marketing Sciences, Rutgers University. First Position: [Assistant Professor, Kean University, College of Business and Public Administration](#)
16. 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](#)
17. 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: [Assistant Professor, Long Island University](#)
18. 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: [Assistant Professor, Weatherhead School of Management, Case Western Reserve University](#)
19. 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: [MTS, ATT-Bell Labs](#)
20. 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: [MTS, ATT-Bell Labs](#)
21. Pravin Jhori (1984). ‘On Maximizing First Passage Probabilities in Gambling and in Queues’, Dept. of Applied Mathematics & Statistics, Stony Brook University.  
First Position: [MTS, ATT-Bell Labs](#)
22. Alan L. Levine (1983). ‘On the Optimal Operation of Queueing Systems–Asymptotic Results’, Dept. of Applied Mathematics & Statistics, Stony Brook University. First Position: [Assistant Professor, Franklin and Marshall College.](#)

Doctoral Committee [Completed]

23. Bo Liu (2018). ‘Optimization In Sparse Learning: From Convexity To Non-Convexity’, Dept. of Computer Science, Rutgers University
24. Myles Garvey (2018). ‘The effects of network structure on supply chain risk propagation’, Dept. of Supply Chain Management, Rutgers University
25. Dionysios S. Kalogierias (2017). ‘Spatially Controlled Relay Beamforming in the Physical Layer’, Dept. of Electrical and Computer Engineering, Rutgers University
26. Javier Rubio-Herrero(2016), ‘Price Setting News-vendor with Mean-Variance Criteria Radars with Sparse Sensing’, Dept. of Management Science & Information Systems, Rutgers University
27. Kwon Gi Mun (2016). Dept. of Supply Chain Management, Rutgers University
28. Shunqiao Sun (2015). ‘Mimo Radars with Sparse Sensing’, Dept. of Electrical and Computer Engineering,

Rutgers University

29. Yifeng Liu (2014). 'Dynamic Revenue and Inventory Management Models', Dept. of Management Science & Information Systems, Rutgers University
30. Xin Xu (2014). 'Essays on the Interface between Supply Chain and Project Management', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University
31. Sitki Gülten (2014). 'Two-Stage Portfolio Optimization With Higher-Order Conditional Measures of Risk', Dept. of Management Science & Information Systems, Rutgers University
32. Ozlem Cavus (2012). 'Risk-Averse Control of Undiscounted Transient Markov Models', Rutgers Center for Operations Research (RUTCOR), Rutgers University
33. Kathleen M. Iacocca (2011). 'Essays on Drug Distribution and Pricing Models', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University
34. Sungyong Choi (2009). 'Risk-Averse Newsvendor Models', Dept. of Management Science & Information Systems, Rutgers University
35. Fleischhacker, Adam (2009). 'An Investigation of Clinical Trial Supply Chains', Dept. of Supply Chain Management and Marketing Sciences, Rutgers University
36. Ching-Yu Chen (2007). 'Essays on Supply Chain Inventory Management', Dept. of Management Science & Information Systems, Rutgers University
37. 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
38. Unsal Ozdogru (2000). 'Performance Analysis of Continuous Material Flow Systems', Rutgers Center for Operations Research (RUTCOR), Rutgers University
39. 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
40. Ashis Kumar Dev (1996). 'Essays in Ownership Structure, Firm Value and Insider Trading', City University of New York
41. Ashis Kumar Dev (1983). 'A General Equilibrium Analysis of the Time Structures of Saving, Investment and Financial Decisions', Dept. of Economics, Stony Brook University
42. 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