CURRICULUM VITAE

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EDUCATION

Ph.D.	Computer and Communications Sciences	University of Michigan, Ann Arbor	1976
M.S.	Computer and Communications Sciences	University of Michigan, Ann Arbor	1973
B.Sc.	Mathematics and Statistics	Tel Aviv University, Ramat Aviv, Israel	1972

RESEARCH INTERESTS

- Supply chain management, finance, modeling, analysis and simulation
- Homeland security, especially port security
- Systems modeling and performance evaluation (mainly for telecommunications systems, supply chain management and homeland security operations)
- Stochastic processes and time series
- Analytical and Simulation modeling methodologies
- Hybrid simulation (discrete and fluid-flow transactions)
- IPA (infinitesimal perturbation analysis)
- Visual interactive environments for modeling and decision support

HONORS AND AWARDS

- AT&T Bell Laboratories Fellow, 1988, "for development of the AT&T Performance Analysis Workstation which has been used to aid design of numerous computer, communications and manufacturing systems".
- IEEE Fellow, 1994, "for contributions to performance analysis methodology and practice".
- NEC Fellow, Performance Analysis, 1994.
- IFIP WG7.3 on Computer Performance Evaluation, 1997.
- Beta Gamma Sigma -- the honor society for collegiate schools of business, 1998.
- Bright Idea Award, 2013.
- Dean's Meritorious Research Award, 2016.
- Center of Supply Chain Management Lifetime Research Excellence Award, 2017.
- 2017-2018 Board of Trustees Award for Excellence in Research, 2018.

PATENTS

- United States Patent Number: 5,257,364 (October 26, 1993) entitled "Method for Generating a Correlated Sequence of Variates with Desired Marginal Distribution for Testing a Model of a Communications System".
- United States Patent Number: 5,784,596 (July 21, 1998) entitled "Algorithmic Modeling of TES Processes for Simulation Analysis".

PROFESSIONAL EXPERIENCE

Rutgers University, Rutgers Business School – Newark and New Brunswick, Department of Supply Chain Management (SCM), Piscataway, New Jersey.
Distinguished Professor, 2002 – present
Special Advisor to the PhD Program, 2016 – present.
Director, Rutgers Stackable Business Innovation (rSBI) Program, 2019 – present.
Teaching courses on supply chain management operations and strategy. Conducted research on production-inventory systems, including modeling, analysis, simulation and supply chain financial management.
As Special Advisor to the PhD program worked to improve the Rutgers Business School PhD program and served as an information resource to PhD students.
As director of the rSBI program, performed the following functions (in addition to routine day-to-day management):
- Managed the program application process and approval process, including leading the creation of white paper documents that explain the program stackability concept and propose its implementation at RBS as the RSBI program.
- Curated the rSBI curriculum across all RBS departments.
- Set up the student enrollment procedure and credential awards procedure.
- Led the design and implementation of the rSBI web page.
- Engaged in numerous marketing activities to publicize the program.

Rutgers University, Rutgers Business School – Newark and New Brunswick, Senior Associate Dean for Strategic Planning and Implementation – New Brunswick, 2010 – 2012
Member, Rutgers Business School Executive Committee, 2010 – 2012.
Appointed Senior Associate Dean to oversee the growth and development of the Rutgers Business School on the Livingston campus, and in this capacity acted as a local dean on that campus, reporting to the Dean, reporting to the Rutgers Business School Dean with dotted lines to the Newark Campus Chancellor and the Rutgers University Executive Vice President.
- In collaboration with Rutgers Business School department heads, developed a strategic plan to differentiate the two Rutgers Business School campuses (Newark and Livingston), and in particular, to identify the differentiating Excellence Focus Areas for each campus.
- Worked closely with Rutgers University stakeholders as the Rutgers Business School User Representative in the design and construction of the new school building, including selection of an Owner Representative (an external company that has the fiduciary responsibility to protect Rutgers interests during construction), designing the layout of floor space in the new building with the architect team, reviewing of design documents (DD) and construction documents (CD) with the Rutgers Facilities department, providing input into change orders, and overseeing the information technology plan for the new building. Set up and chaired a Building Committee to obtain input from faculty and staff and conveyed this feedback to Rutgers stakeholders.
- While construction was in the design stage, oversaw the remodeling of the old Rutgers Business School Building to maximize office space for intake of new faculty and staff. Later on, while construction was in progress, planned and managed all space allocation, including housing incoming faculty in off-building offices.
- In collaboration with the Sr. Associate Dean for Faculty, developed a faculty and staff hiring plan and worked to obtain the corresponding lines, and closely supervised hiring of faculty to be housed in the new Business School building for quality control and compliance with the aforementioned strategic plan.
- In collaboration with the Senior Associate Dean for Academic Programs and the Executive Director of the MBA program, worked on the design and implementation of dual MBA degrees with major academic units of Rutgers University (e.g., School of Engineering, School of Arts and Sciences and School of Pharmacy) to allow undergraduates to obtain an MBA degree after an additional (fifth) year of study (5-year accelerated MBA). Worked with MBA stakeholders to establish a full-time MBA program on the Livingston campus and develop its syllabus.

- In collaboration with the Sr. Associate Dean for Undergraduate Education on the Livingston campus, designed and implemented improved student services (extended hours, student service evaluation form, and reception area for students).
- In collaboration with the Rutgers Business School Technology Support Group, worked on the design and implementation of Internet and kiosk-based information dissemination to students, faculty and staff.

Co-Director, CAIT-DIMACS Laboratory for Port Security (LPS), 2006 – 2010
Managing Director, Business, Engineering, Science and Technology (BEST) Institute, 2008 – 2010.
Teaching courses on supply chain management operations and strategy. Research on production-inventory systems, including modeling, analysis, simulation and gradient based optimization. As Managing Director, worked to establish a Rutgers-wide entrepreneurship program and to commercialize Rutgers intellectual property.

Rutgers University, Rutgers Business School – Newark and New Brunswick, Department of Management Science and Information Systems (MSIS), Piscataway, New Jersey.
Distinguished Professor, 2002 – present
Director, PhD in Management Program, 2002 - 2003
Vice-Chair, Department of MSIS, 1998 - 2001
Professor, 1996 - 2002
Member, RUTCOR -- Rutgers University Center for Operations Research, 1996 - present
Teaching courses on management information systems, business applications of the Internet and business statistics. At RUTCOR, continuing the research activities described in the next item. Established ITECC (Information Technology and Electronic Commerce Clinic) in the Department of MSIS, and as its first director, recruited affiliated companies. ITECC was an education/training and research facility dedicated to IT/IS (Information Technology/Information Systems) activities, especially Internet/Web-oriented (e.g., Web site construction, electronic commerce, electronic marketing, etc.), providing a venue for training students in IT/IS, and facilitating IT/IS research projects of MSIS faculty (e.g., grant-related work, industry collaboration, etc.)

Bellcore, Morristown, New Jersey
Consultant, 1995-1996
Visiting Scholar, Rutcor – Rutgers Center for Operations Research, 1995 -- 1996
Consulting at Bellcore on a large database tool for analyzing very large traffic traces of high-speed telecommunications networks. Responsible for tool design and implementation. At Rutcor, conducting research on decision-support systems (algorithms and graphical user interfaces), TES process theory and its generalizations, applications of TES processes and IPA (infinitesimal perturbation analysis) of continuous flow models (fluid models). Exploring fluid simulation models for large high-speed telecom networks.

NEC USA Inc., Computer & Communications Research Laboratories (CCRL), Princeton, New Jersey
NEC Fellow, 1994-1995
Department Head, Performance Analysis, 1991-1994
Deputy Director, 1989-1991
Participated in establishing CCRL, defining its mission and hiring key members at its inception. Later, headed the Performance Analysis group (around 5 employees). Responsibilities included day-to-day management of telecommunications research and performance analysis of network architectures, protocols, overload control and capacity allocation, research, and interfacing to universities and industrial labs, including evaluation of joint research projects. Invented the concept of Transform-Expand-Sample (TES) processes and modeling methodology, and awarded two patents for TES-related algorithms. TES processes are versatile in the sense that they can have arbitrary marginal distributions, a variety of autocorrelation functions (e.g., monotone, oscillating, alternating) and a broad qualitative range of sample paths. The distinguishing feature of the TES modeling methodology is its ability to simultaneously capture both first-order and second-order statistics of empirical data. Developed the TES modeling environment, TEStool, as a visual, interactive software package with heuristic and automated modeling capabilities, forecasting

facilities and Monte Carlo generators of modeled time series. Applied the TES modeling methodology and TEStool effectively to construct accurate teletraffic models, primarily of compressed video.

AT&T Bell Laboratories, Performance Analysis Department, Holmdel, New Jersey
Member of Technical Staff, 1981 – 1989
AT&T Bell Laboratories Fellow, 1988
Participated in numerous projects involving modeling and analysis of real-life systems including telecommunications, operations support systems, computer system reliability, analysis of computer and network security, analysis of manufacturing lines, expert systems for manufacturing. Designed and implemented a pioneering modeling support environment, called PAW (the AT&T Performance Analysis Workstation, later renamed Q+) as a visual, fully interactive, animated simulator for queueing systems. Was awarded the title of AT&T Fellow in 1988 for the technical achievement of developing Q+ as well as its impact on modeling in AT&T. Q+ has been used extensively in AT\&T, and has also been sold as a software product outside AT&T.

Northwestern University, Department of Industrial Engineering and Management Sciences, Evanston, Illinois
Assistant Professor, 1977 - 1981
Worked on the theory of product-form queueing networks and investigated their state process and waiting times. Studied traffic processes (mainly Poisson streams) in such networks, the reversibility of their state process, and traffic-imbedded state processes and sojourn times along overtake-free paths. Worked on system-theoretic hierarchies and morphism relations in DEVS (Discrete Event Systems) and DEVN (Discrete Event Networks). Derived and implemented numerical algorithms for queueing networks based on Randomization (Uniformization) to compute approximations for state and sojourn time distributions.

UNIVERSITY, SCHOOL AND DEPARTMENTAL SERVICE

- **Director**, Rutgers Stackable Business innovation (rSBI) program.
- **Co-Director**, Master of Supply Chain Analytics program.
- **Chair**, Administrator Review Panel, 2016.
- **Member**, Legislative Open House Panel on Telemedicine, April 4, 2016.
- **Member,** Compensation Review Committee (CRC), 2016.
- **Member,** Peer Evaluation Committee (PEC), 2016.
- **Member,** Appointments and Promotions (A&P) Committee, since 2008.
- **Chair, Ad-Hoc Administrator Evaluation Advisory Committee**, April 2013 – November, 2013.
- **Senior Associated Dean for Strategic Planning and Implementation – New Brunswick**, 2010 – 2012.
- **Member,** Dean's Cabinet, 2010 – 2012.
- **Member**, Rutgers Innovation Park Internal Advisory Board, 2011 – 2012.
- **Member**, Rutgers Business School Dean Search Committee, 2010 – 2011.
- **Member**, Smith Chair Search Committee, 2010 – 2011.
- **Chair,** New Brunswick RBS Building Committee, 2010-2012.
- **Member**, Rutgers University Committee for Harmonizing Technology Commercialization at Rutgers, 2009 – 2011.
- **Managing Director**, Business, Engineering, Science and Technology (BEST) Institute, 2008 – 2010.
- **Co-Director**, DIMACS-CAIT Laboratory for Port Security (LPS), 2006 – 2012.
- **Member**, Rutgers University Transportation Coordinating Council, 2004 -- present.
- **Academic Research Fellow**, Rutgers Center for Supply Chain Management, 2004 – present.
- **Director**, PhD in Management Program, 2002 – 2003.
- **Member**, New Jersey Logistics Council, 2002 -- 2005.
- **Vice-Chair**, Department of MSIS, 1998 – 2001.
- **Director**, Information Technology and Electronic Commerce Clinic (ITECC), 1998 – 2008.

PROFESSIONAL SERVICE

- **Panel Member**, Industrial and Systems Engineering for the Future, *Institute of Industrial and Systems Engineers (IISE) Northeast Regional Conference 2023*, New York University, New York, March 26, 2023.
- **Panel Member**, *New Jersey Offshore Wind Strategic Plan, Supply Chain and Workplace Development*, North Jersey Transportation Planning Authority, April 5, 2019.
- **Session Chair**, *20th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management* (*PBFEAM 12*), Rutgers University, New Jersey, September 8 - 9, 2012.
- **Session Chair**, *International Workshop in Applied Probability (IWAP 12)*, Jerusalem, Israel, June 11-14, 2012.
- **Panelist,** NSF panel on Operations Research, Arlington, VA, April 22-23, 2012.
- **Member, Technical Program Committee**, *3-rd International ICST Conference on Simulation Tools and Techniques* (*SIMUTools 2010*), Malaga, Spain, March 15-20, 2010.
- **Member, Program Committee,** *2009 IEEE Symposium on Computational Intelligence for Financial Engineering (CIFER 09)*, March 30 – April 2, 2009, Nashville, TN.
- **Member, Technical Program Committee**, *2-nd International Workshop on the Evaluation of Quality of Service through Simulation in the Future Internet (QoSim 2009)*, Rome, Italy, March 2-6, 2009.
- **Co-organizer**, *Workshop on Port Security/Safety, Inspection, Risk Analysis and Modeling*, November 17-18, 2008, Rutgers University.
- **Member, Program Committee**, *Sixth IEEE International Conference on Intelligence and Security Informatics* (*IEEE ISI-2008*), Taipei, Taiwan, June 17 – 20, 2008.
- **Keynote address,** "Hybrid Stochastic Fluid Simulation: Modeling, implementation and IPA", *First International Workshop on the Evaluation of Quality of Service through Simulation in the Future Internet* (*QoSim 08*), Marseille, France, March 3, 2008.
- **Program Co-Chair,** *Fifth IEEE International Conference on Intelligence and Security Informatics* (*IEEE ISI-2007*), New Brunswick, May 23 – 24, 2007.
- **Session Co-Chair,** "Port Security", *Seventh New Jersey Universities Homeland Security Research Consortium Symposium*, Rutgers University, November 20, 2006.
- **Panelist,** Peer Review Panel of the Information and Telecommunication Technology Center (ITTC), Kansas Technology Enterprise Corporation (KTEC), the University of Kansas in Lawrence, Kansas, May 6, 2005.
- **Panelist,** NSF panel on Dynamic Data Driven Application Systems, Arlington, VA, July 28-29, 2005.
- **Panelist,** Peer Review Panel of the Information and Telecommunication Technology Center (ITTC), Kansas Technology Enterprise Corporation (KTEC), the University of Kansas in Lawrence, Kansas, April 12, 2001.
- **Panelist,** NSF panel on Networking Research, Arlington, VA, November 8-9, 2001.
- **Associate Editor,** *Journal of Methodology and Computing in Applied Probability* (*MCAP*), 1999 -- present.
- **Associate Editor,** *Journal of Applied Mathematics and Stochastic Analysis* (*JAMSA*), 1996 -- 2010.
- **Associate Editor,** *ACM Transactions on Modeling and Computer Simulation* (*TOMACS*), 1997 -- 2000.
- **Member,** IFIP WG7.3 on Computer Performance Evaluation, 1997 -- present.

EXTERNAL GRANTS AND CONTRACTS

- DHS award 70RSAT18G00000001/70RSAT21FR0000127, "Detecting Criminal Disruption of Supply Chains Study" (with F. Roberts, D. Egan, A. Baveja, and W. Chen), $500,000 for the period 9/20/21 – 9/19/23.
- Pfizer Independent Grants for Learning & Change, "Expanding the Rheumatology Workforce via Training in Telemedicine" (with N. Schlesinger, A. Bagchi, A. Baveja, V. Hsu, J. Kwong), $342,903 for the period 11/15/18 to 6/30/20.

- DHS-BTI Contract 2015-ST-061-BSH001, "Modeling Methodology and Simulation of Port-of-Entry Systems" (with W. Chen). The grant is extendable to 5 years with a total budget of up to $1,475,000, starting January 16, 2016. The first grant period from 1/16/16 to 6/30/16 was funded at $159,800. The second grant period from 7/1/16 to 6/30/17 was funded at $257,078. The third grant period from 7/1/17 to 6/30/18 was funded at $267,709.
- DHS/S&T, Contract No. HSHQDC-11-C-00043, "Optimal Preparedness and Response to Pharmaceutical Supply Chain Emergencies" (with L. Lei, L. Qi and S. Handley), $524,625 for the period 7/1/11 to 6/30/13.
- National Collegiate Inventors and Innovators Alliance (NCIIA), "Enhancing Entrepreneurship Education and Training via the Rutgers Entrepreneurship Lab" (with D. Silver and B. Sopranzetti), $10,000 for the period 9/1/09 to 8/31/10.
- New Jersey Department of Transportation (NJ-DOT), "Modeling and Analysis of Vessel Traffic in Delaware River and Bay: Risk Assessment and Mitigation Study" (with T. Altiok), Basic Agreement 2004R002, $486,040 for the period 5/1/07 to 4/30/09.
- U.S. Bureau of Customs and Border Protection, Department of Homeland Security, Contract No. HSBP1105P07043, "Modeling VACIS Security Operations at NJ/NY Marine Terminals" (with T. Altiok), $63,592 for the period 5/15/05- to 9/31/06.
- DARPA/ITO Agreement F30602-00-2-0556: "Measurement-Based Hybrid Fluid Flow Models for Fast Multi-Scale Simulation and Control" (with K. Sohraby, University of Missouri - Kansas City and Y. Wardi, Georgia Tech), BAA 00-18, Network Modeling and Simulation. $800,000 for the period 6/13/2000 to 6/12/2003 (Rutgers portion: $298,425).
- NSF Grant DMI-0085659: "Capacity Planning and Design for Transportation and Handling of Bulk Coal over Distribution Networks" (with T. Altiok, Dept. of Industrial Engineering and Y. Wardi, Georgia Tech), Division of Design, Manufacture and Industrial Innovation. $150,000 for the period 9/1/2000 to 8/31/2001 (Rutgers portion: $42,466).
- Rainbow Technology, Inc., Account No. 204924: "Data Mining Tools in Statistical Modeling of Highway Fatalities" (with S. Singh). $35,000 for the period 7/14/01 to 01/13/02.
- StatSoft, Inc., Account No. 420702: "The Data Miner" (with S. Singh). $60,000 for the period 7/14/00 to 07/13/01.
- NSF Grant DMI-9812858: "Correlation Analysis of Manufacturing Systems" (with T. Altiok, Dept. of Industrial Engineering), Division of Design, Manufacture and Industrial Innovation. $389,780 for the period 9/1/1998 to 8/31/2001, (Rutgers portion: $194,890).
- DARPA/ITO Contract N6601-97-C-8537: "A Novel Approach to Information Finding in Networked Environments", (with P. Kantor, SCILS, and E. Boros, RUTCOR), BAA 97-09, Collaboration, Visualization and Information Management. $1,056,168 for the period 7/1/1997 to 6/30/2000.
- DARPA/ITO Contract N6601-97-1-8913: "Combined Real-Time Modeling and Performance Analysis for Complex Networks" (with K. Sohraby, University of Missouri - Kansas City), BAA 97-04, Network Engineering and Management, Autonomous Network Management. $1,063,000 for the period 7/14/1997 to 7/13/2000 (Rutgers portion: $430,000).

INTERNAL GRANTS AND CONTRACTS
- Rutgers-Newark Initiative for Multidisciplinary Research Teams (IMRT) Award, "Mobilizing Multidisciplinary Partnerships to Enhance Telehealth Uptake in Underserved Communities", (with A. Bagchi, A. Baveja, D. Hill, M. Klapholz, C. Menifield, S. Swaminathan, A. Mammo, P. Weber), $70,514 for the period 7/1/19 to 6/30/21.
- Rutgers-Newark Chancellor Seed Award, "Telemedicine Delivery for Underserved Populations in Greater Newark", (with W. Chen, D. Dobrzykowski, K. Lyons, S. Yeniyurt, J. Backstrand, M. Holzer, A. Shark, A. Bagchi, W. Holzemer, F. Munet-Vilaro), $50,000 for the period 7/1/15 to 6/30/18.
- Rutgers University Academic Excellence Fund grant, "The Rutgers Entrepreneurship Lab at the BEST Institute" (with D. Silver and B. Sopranzetti), $40,000 for the period 7/1/09 to 6/30/11.
- Rutgers University Academic Excellence Fund grant, "The Joint DIMACS-CAIT Laboratory for Port Security" (with T. Altiok, F. Roberts and A. Maher), $160,000 for AY 2006-2008.

- Rutgers Business School, Customer Relationship Management Research Center, "TES-Based Forecasting for Marketing Applications", $10,000 for the period 5/1/06 to 8/31/06.
- Rutgers University Academic Excellence Fund grant, "Feasibility study to establish a Freight Transportation Center of Excellence at Rutgers, The State University of New Jersey" (with M. Robins, M. Boilé, M. Greenberg, L. Lei, A. Maher, K. Ozbay, T. Altiok, M. Jafari), $160,000 for AY 2004-2006.
- Rutgers University Strategic Resource and Opportunities Analysis (SROA) grant: "A Virtual Trading Room at the Faculty of Management" (with I. Brick, R.R. Chen, O.Palmon, A. Gal, A. Ruszczynski). $100,000 for the period 7/1/1999 to 6/30/2000.
- GE Fund Learning Excellence Project grant: "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, M. Katehakis, Z. Stoumbos). $14,000 for the period 7/1/1998 to 6/30/1999.
- GE Fund for Learning Excellence Project grant: "Business Telecommunications and Electronic Commerce Education and Training", $7,500 for the period 7/1/1997 to 6/30/1998.

BOOKS

1. R. Rubinstein and B. Melamed, *Modern Modeling and Simulation*, John Wiley and Sons, 1998 (350 pages), ISBN 0-471-17077-1.
2. T. Altiok and B. Melamed, *Simulation Modeling and Analysis with Arena*, Academic Press, 2007 (456 pages), ISBN 978-0-12-370523-5.

BOOK CHAPTERS

1. W. Chen, B. Melamed, O. Sokolinskiy and B. Sopranzetti, "Equilibrium Rate Analysis of Cash Conversion Systems: The Case of Corporate Subsidiaries, in *Handbook of Financial Econometrics, Mathematics, Statistics, and Technology*", C.-F. Lee, Ed.), 1725—1762, World Scientific, 2020.
2. V. Holzmann, A. Shenhar, Y. Zhao, and B. Melamed, "Cracking the Code of Megaproject Innovation: The Case of Boeing's 787", Chapter 20 in *The Oxford Handbook of Megaproject Management* (B. Flyvbjerg, Ed.), 453—474, Oxford University Press, 2017.
3. B. Melamed, "ARM Processes and Their Modeling and Forecasting Methodology", in *Handbook of Quantitative Finance and Risk Management*, (C.-F. Lee, Alice C. Lee, J. Lee, Eds.), Chapter 73, 1135-1149, Springer, 2010.
4. D.L. Jagerman, B. Melamed and W. Willinger, "Stochastic Modeling of Traffic Processes", invited chapter in *Frontiers in Queueing: Models and Applications in Science and Engineering* (J.H. Dshalalow, Ed.), 271--320, CRC Press, 1997.
5. V. Frost and B. Melamed, "Modeling and Simulation for Telecommunications Networks", invited chapter in *Encyclopedia of Telecommunications*, (F.E. Froehlich and A. Kent, Eds.), Vol. 11, 341--398, Marcel Dekker, 1996.
6. B. Melamed and D. Yao, "The ASTA Property", invited chapter in *Advances in Queueing: Theory, Methods and Open Problems* (J.H. Dshalalow, Ed.), 195--224, CRC Press, 1995.
7. B. Melamed, "An Overview of TES Processes and Modeling Methodology", in *Performance Evaluation of Computer and Communications Systems* (L. Donatiello and R. Nelson, Eds.), 359--393, Lecture Notes in Computer Science, Springer-Verlag, 1993.
8. Y. Lirov, B. Melamed and R.J.T. Morris, "Combined Control and Diagnosis for Complex Processes: An Intelligent Control Approach", in *Expert Systems in Engineering Applications* (S. Tzafestas, Ed.), Chapter 11, 222--239, Springer-Verlag, 1993.
9. F.J. Beutler, B. Melamed and B.P. Zeigler, "Equilibrium Properties of Arbitrarily Interconnected Queueing Networks", in *Multivariate Analysis IV* (P. R. Krishnaiah, Ed.), 351--370, North-Holland, 1977.

REFEREED JOURNAL PUBLICATIONS

1. W. Chen, G.Ç. Kumcu, B. Melamed and A. Baveja, "Managing Resource Allocation for the Recruitment Stocking Problem", *Omega*, to appear.

2. J.R. Francis, A. Baveja, D. Ding, A.D. Bagchi, B. Melamed, and D. Hill, "Navigating Future Shifts in Healthcare Service Delivery: Three Insights from Supply Chain Management", *Management and Business Review*, to appear.

3. M.N. Katehakis, B. Melamed and J. Shi, "Optimal Replenishment Rate for Inventory Systems with Compound Poisson Demands and Lost-Sales: A Direct Treatment of Time-Average Cost", *Annals of Operations research*, Vol. 317:665–691, 2022.
Available at: https://doi.org/10.1007/s10479-015-1998-y.

1. B. Melamed, R. Leuschner, W. Chen, D. S. Rogers and M. Cao, "Inventory Turns and Finite-Horizon Little's Laws", *Annals of Operations research*, Vol. 317, 129–146, 2022. Available at: https://doi.org/10.1007/s10479-016-2157-9

2. A.D. Bagchi, K. Damas, N. Salazar de Noguera, B. Melamed, C. Menifield, A. Baveja, P. Weber and S. Swaminathan, "Comfort with Telehealth among Residents of an Underserved Urban Area", *J. of Primary Care & Community Health*, Vol. 13, 1–9, 2022. DOI: 10.1177/21501319221119692.

3. A. Ninh,·B. Melamed,·and Y. Zhao, "Analysis and Optimization of Recruitment Stocking Problems", *Annals of Operations research*, Vol. 295, 747–767, 2020. Available at: https://doi.org/10.1007/s10479-020-03822-2.

4. A. Baveja, A. Kapoor and B. Melamed, "Stopping Covid-19: A Pandemic-Management Service Value Chain Approach", *Annals of Operations research*, Vol. 289, 173–184, 2020. Available at: https://doi.org/10.1007/s10479-020-03635-3

5. O. Sokolinskiy, B. Melamed and B. Sopranzetti, "Precautionary Replenishment in Financially-Constrained Inventory Systems Subject to Credit Rollover Risk and Supply Disruption", *Annals of Operations research*, Vol. 271, 971-997, 2018.

6. A. Bagchi, B. Melamed, S. Yeniyurt, W. Holzemer and D. Reyes, "Telemedicine delivery for urban seniors with low computer literacy: A pilot study", *Online Journal of Nursing Informatics (OJNI),* Vol. 22, No. 2, 17 pages, 2018. Available at:
https://www.himss.org/library/telemedicine-delivery-urban-seniors-low-computer-literacy-pilot-study.

7. W. Chen, A. Baveja and B. Melamed, "Temporal Shaping of Simulated Time Series with Cyclical Sample Paths", *Probability in the Engineering and Informational Sciences*, Vol. 32, No. 1, 126-143, 2018.

8. W. Chen, B. Melamed, O. Sokolinskiy and B. Sopranzetti, "Cash Conversion Systems in Corporate Subsidiaries", *Manufacturing & Service Operations Management*, Vol. 19, No. 4, 604-619, 2017.

9. M.N. Katehakis, B. Melamed and J. Shi, "Cash-Flow Based Dynamic Inventory Management", *Production and Operations Management*, Vol. 25, No. 9, 1558–1575, 2016.

10. A. Shenhar, V. Holzmann, B. Melamed and Y. Zhao "The Challenge of Innovation in Highly Complex Projects: What Can We Learn from Boeing's Dreamliner Experience?" *Project Management Journal*, Vol. 47, No. 2, 62-78, 2016.

11. B. Melamed and D.S. Rogers, "Equilibrium Rate Analysis in Supply Chain Financial Management", *Supply Chain Forum: an International Journal*, Vol. 16, No. 3, 52-68, 2015.

12. J. Shi, M.N. Katehakis, B. Melamed and Y. Xia, "Production-Inventory Systems with Lost-sales and Compound Poisson Demands", *Operations Research*, Vol. 6, No. 5, 1048 – 1063, 2014.

13. J. Shi, M.N. Katehakis and B. Melamed, "Martingale Methods for Pricing Inventory Penalties under Continuous Replenishment and Compound Renewal Demands", *Annals of Operations research*, Vol. 208, 593-612, 2013.

14. B. Melamed and X. Zhao, "MARM Processes Part II: The Empirically-Based Subclass", *Methodology and Computing in Applied Probability*, Vol. 15, No. 1, 37-83, 2013.

15. B. Melamed and X. Zhao, "MARM Processes Part I: General Theory", *Methodology and Computing in Applied Probability*, Vol. 15, No. 1, 1-35, 2013.

16. D.S. Rogers, B. Melamed and R.S. Lembke, "Modeling and Analysis of Reverse Logistics", *Journal of Business Logistics*, Vol. 33, No. 2, 107–117, 2012.

17. B. Melamed, Y. Fan, Y. Zhao and Y. Wardi, "IPA Derivatives for a Discrete Model of Make-To-Stock Production-Inventory Systems With Backorders", *Annals of Operations Resea*rch, Vol. 181, No. 1, 1-19, 2010.

18. Y. Wardi, R. Adams and B. Melamed, "A Unified Approach to Infinitesimal Perturbation Analysis in Stochastic Flow Models: The Single-Stage Case", *IEEE Trans. on Automatic Control*, Vol. 55, No. 1, 89 – 103, 2010.

19. Y. Fan, B. Melamed, Y. Zhao and Y. Wardi, "IPA Derivatives for Make-to-Stock Production-Inventory Systems With Backorders Under the (*R,r*) Policy", *Methodology and Computing in Applied Probability*, Vol. 11, No. 2, 159 – 179, 2009.

20. V. Ungureanu, B. Melamed, M. Katehakis, "Effective Load Balancing for Cluster-Based Servers Employing Job Preemption" *Performance Evaluation*, Vol. 65, 606 – 622, 2008.

21. Y. Zhao and B. Melamed, "IPA Derivatives for Make-to-Stock Production-Inventory Systems with Lost Sales", *IEEE Trans. on Automatic Control*, Vol. 52, No. 8, 1491 – 1495, 2007.

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COURSES TAUGHT AT RUTGERS UNIVERSITY

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- 33:623:385 *Statistical Methods in Business* (core MSIS undergraduate course)
- 33:623:410 *Telecommunications Network Systems in Business* (elective undergraduate course)
- 33:623:470 *Advanced Management Information Systems* (elective undergraduate course)
- 33:623:492 *Projects in Information Systems* (elective undergraduate course)
- 22:799:580 *Supply Chain Logistics*, renamed *Operations Analysis* (core MBA course)
- 22:799:607 *Supply Chain Management Strategies* (elective MBA course)
- 22:799:640 *Supply Chain Financial Management* (elective MBA course)
- 22:799:692 *Supply Chain Management Strategies for Non RBS Students* (elective MBA course)