

## Curriculum Vitae

### Opher Baron

Rotman School of Management

University of Toronto

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Toronto, ON,

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### Academic Positions

**The Rotman School of Management, University of Toronto**

**Toronto, Canada**

Area Coordinator Operations Management and Statistics

(July 2015 – Present).

Professor of Operations Management

(July 2014 – Present).

Associate Professor of Operations Management

(July 2009 – June 2014).

Assistant Professor of Operations Management

(July 2003 – June 2009).

**School of Information Management and Engineering, Shanghai University of Finance and Economics,  
Shanghai, China**

Visiting Professor

(July 2016 – February 2017).

**Industrial Engineering & Management Faculty, Technion, Israel Institute of Technology,  
Haifa, Israel**

Visiting Associate Professor of Industrial Engineering

(July 2009 – July 2010).

### Education

**Massachusetts Institute of Technology** (September 1999- June 2003)

**Cambridge, MA**

PhD in Operation Management, Sloan School of Management.

PhD Thesis title: Pricing and Admission Control for Shared Computer Services Using the Token Bucket Mechanism.

**TECHNION, Israel Institute of Technology** (October 1997 - August 1998)

**Haifa, Israel**

Master of Business Administration.

**TECHNION, Israel Institute of Technology** (October 1994 - February 1998)

**Haifa, Israel**

Bachelor of Science, Summa Cum Lauda, Industrial Engineering and Management.

Majors: Operations Management, Operations Research, and Marketing.

## Honors Grants and Awards

- NSERC grant of \$195,000, 2018-2022. Project “Waiting Time Management, Its Consideration with Business Analytics, and Operating Autonomous Vehicles.”
- 1000 Talent Plan Scholar of the Shanghai Municipal Government, 2016. Award of about \$130,000 for three years.
- Visiting Fellowship under the Chinese Academy of Science Presidential Fellowship Initiative, 2016. Award of about \$8,000 to support a visit to Chinese Academy of Science in Beijing.
- For the paper Wang J., Baron, O., and Scheller Wolf, A., (2015) M/M/c queue with two priority classes. *Operations Research*, **63**(3):733-749. **Wang Jianfu won** the Queueing SIG student competition award, CORS 2016.
- Baron, O., Hajizadeh, I. and Milner, J., (2011) Now Playing: DVD Purchasing for a Multi-Location Rental Firm,” *M&SOM*, Vol. 13, No. 2, 2011. Finalist M&SOM best paper award 2014.
- For the paper Baron, O., Berman, O., Krass, D., and Wang J. Using strategic idleness to improve customer service experience in service networks. *Operations Research*, 2013, **62**(1), January-February 2014. pp123-140. **Wang Jianfu won** the Queueing SIG student competition award, CORS 2014.
- For the paper Sarhangian, V., Abouee Mehrizi, H., Baron, O., Berman, O., Allocation policies in blood transfusion. *Manufacturing & Service Operations Management*, 2017, **20**(2). **Sarhangian Vahid won** the Runner-up in the CORS 2014 Student Paper Competition (Open Category).
- For the paper Afeche, P., Araghi, M., and Baron, O., Customer Acquisition, Retention, and Service Access Quality: Optimal Advertising, Capacity Level and Capacity Allocation. *Manufacturing & Service Operations Management*, 19(4) **Araghi Mojtaba** won a Finalist for the CORS 2013 Student Paper Competition (Open Category)
- NSERC grant of \$140,000, 2013-2017. Project “Improving Operations in Services and Manufacturing Using Queueing Models.”
- 2011 M&SOM Meritorious Service Award
- NSERC grant of \$85,000, 2008-2012. Project “Improving service operations.”
- 2007 Roger Martin and Nancy Lang Award for Excellence in Research, University of Toronto’s Rotman School of Management.
- Teaching award in the Rotman School of Management (2004).
- NSERC grant of \$51,000, 2004-2007. Project “Pricing and resources planning to improve the efficiency of shared services.”
- Connaught Automatic Start-Up Award for \$10,000, 2003, from the University of Toronto for working on “Provisioning of shared services in a shared manner.” This grant was extended with additional \$30,000 for two years from the Rotman School. Total Grant \$40,000.
- Peterson Fellowship 2000-2003. Sloan School of Management, Massachusetts Institute of Technology.
- Presidential Graduate Fellow 1999-2000. Sloan School of Management, Massachusetts Institute of Technology.
- Barnov Prize in Marketing 1996. For the work “Possible uses of video conference in the Technion” (with four coauthors).

## Keynotes and other High Profile Presentations

1. Queueing and Markov Chain Decomposition (*QMCD*), the Single Stage Subsystems Case: Motivation and Examples. Conference Tutorial, Fields Workshop on Stochastic Processes and Their Applications, Ottawa, Aug 9-11, 2017.
2. From Product Form Queues to Queue and Markov Chain Decomposition (*QMCD*): Motivation and Examples. Conference Tutorial, CORS, Banff, Canada, 2016 (May 2016)
3. A Game between a Terrorist and a Passive Defender. (w. O. Berman and A. Gavious.) Keynote Lecture at *the Operations Research Society – Israel, Annual Conference*, 2016. (May 2016)
4. Strategic Idling and dynamic scheduling in open-shop service networks: case study and analysis. (w. Berman, O., Krass, D., and Wang J.). *Workshop On Supply Chain Analytics, Honoring David Simchi-Levi on the Occasion of His 60th Birthday*, October 15-16, 2015, University of California, Berkeley
5. Analysis of State-Dependent Queues (w. Abouee Mehrizi, H), *Conference in Honour of Oded Berman*, Rotman School of Management, October 2012.

## **Publications**

1. Afeche, P., Baron, O., Milner, J., and Roet-Green, R., Pricing and Prioritizing Time-Sensitive Customers with Heterogeneous Demand Rates *Operations Research* (Forthcoming)
  2. Baron, O., Economou, A., Manou, A., (2018) The state-dependent M/G/1 queue with orbit *Queueing Systems*. 1-35, [10.1007/s11134-018-9582-1](https://doi.org/10.1007/s11134-018-9582-1).
  3. Wu, D. D., Zhangy, B., Baron O., A Trade Credit Model with Asymmetric Retailers *Production and Operations Management* (Forthcoming).
  4. Baron, O., Berman, O., Gaviou, A., (2018) A game between a terrorist and a passive defender *Production and Operations Management*, 27(3), March 2018, Pages 433–457.
  5. Sarhangian, V., Abouee Mehrizi, H., Baron, O., Berman, O., (2017) Allocation policies in blood transfusion. *Manufacturing & Service Operations Management*, 20(2), pp. 347-362  
<https://doi.org/10.1287/msom.2017.0650>.
- Sarhangian, V. was the Runner-up in the CORS 2014 Student Paper Competition (Open Category)** for this paper.
6. Baron, O., Berman, O., Perry, D. (2017) A Markovian continuous review inventory model with leadtimes and disasters *Probability in the Engineering and Informational Sciences*, June, 2017 pp.1-26.  
<https://doi.org/10.1017/S0269964817000225>.
  7. Afeche, P., Araghi, M., and Baron, O., (2017) Customer Acquisition, Retention, and Service Access Quality: Optimal Advertising, Capacity Level and Capacity Allocation. *Manufacturing & Service Operations Management*, 19(4), pp. 674-691 <https://doi.org/10.1287/msom.2017.0635>  
**Araghi, M., was a Finalists in the CORS 2013 Student Paper Competition (Open Category).** (That version was titled: Customer acquisition retention and service quality for a call center optimal promotions priorities and staffing.
  8. Baron, O., Berman, O., Krass, D., and Wang J. (2017) Strategic idling and dynamic scheduling in an open-shop service network: case study and analysis. *Manufacturing & Service Operations Management*, Winter 2017, 19(1), pp. 52–71. [10.1287/msom.2016.0591](https://doi.org/10.1287/msom.2016.0591)
  9. Baron, O., Kerner, Y. (2016) A queueing approach to a multi-class M/G/1 make-to-stock with backlog. *Operations Research Letters*, 44(5), September 2016, Pages 666–671.
  10. Sarhangian, V., Abouee-Mehrizi, H., Baron, O., Berman, O., Heddle, N. M. and Barty, R. (2016) Reducing the age of transfused red blood cells in hospitals: ordering and allocation policies. *Vox Sanguinis* 110: 385–392. doi:10.1111/vox.12374
  11. Abouee Mehrizi, H., Baron, O., (2016) Queue decomposition and its applications in state-dependent queueing systems. *Queueing Systems*, February 2016, 82(1), pp 121-148.  
<http://dx.doi.org/10.1007/s11134-015-9461-y>
  12. Baron, O., Berman, O., Wu, D. (2016) Bargaining within the supply chain and its implications in an industry. *Decision Science*, 47(2), April 2016, Pages: 193–218, <http://dx.doi.org/10.1111/deci.12189>
  13. Wang J., Baron, O., and Scheller Wolf, A., (2015) M/M/c queue with two priority classes. *Operations Research*, 63(3):733-749. <http://dx.doi.org/10.1287/opre.2015.1375>  
**Wang J. won the Queueing SIG student competition award, CORS 2016.**
  14. Baron, O., Hu, M., Najafi Asadolahi S., and Qu, Q., (2015) Newsvendor selling to loss averse consumers with stochastic reference points. *Manufacturing & Service Operations Management*, Fall 2015, 17(4):456-469 <http://dx.doi.org/10.1287/msom.2015.0532>
  15. Abouee Mehrizi, H., Baron, O., Berman, O., (2014) Exact analysis of capacitated two-echelon inventory systems with priorities. *Manufacturing & Service Operations Management*, 16(4) pp561-577. DOI: <http://dx.doi.org/10.1287/msom.2014.0494>
  16. Baron, O., Berman, O., Krass, D., and Wang J. (2014) Using strategic idleness to improve customer service experience in service networks. *Operations Research*, 62(1), January-February 2014. pp123-140. DOI: <http://dx.doi.org/10.1287/opre.2013.1236>  
**Wang J. won the Queueing SIG student competition award, CORS 2014.**
  17. Afeche, P., Baron, O., and Kerner, Y. (2013) Pricing time-sensitive services based on realized performance. *Manufacturing and Service Operations Management*, 15(3) pp492-506. DOI: <http://dx.doi.org/10.1287/msom.2013.0434>

### **Publications (continued)**

18. Abouee Mehrizi, H., Balcioglu, B., Baron, O. (2012). Strategies for a centralized single product multi-class M/G/1 make-to-stock queue. *Operations Research* **60**(4) pp. 803–812. DOI: <http://dx.doi.org/10.1287/opre.1120.1062>
19. Baron, O., Hajizadeh, I., Milner, J. (2011). Now playing: DVD purchasing for a multilocation rental firm. *Manufacturing and Service Operations Management*, **13**(2) 209-226. DOI <http://dx.doi.org/10.1287/msom.1100.0314>  
This paper is the **Finalist M&SOM best paper award 2014**.
20. Baron, O., Berman, O., Perry, D. (2011). Shelf-space management when demand depends on the inventory level. *Production and Operations Management*, **20**(5) 714-726. DOI <http://dx.doi.org/10.1111/j.1937-5956.2010.01201>
21. Baron, O., Milner, J., Naseraldin, H. (2011). Facility location: a robust optimization approach. *Production and Operations Management*, **20**(5) 772-785. DOI <http://dx.doi.org/10.1111/j.1937-5956.2010.01194.x>
22. Baron, O., Berman, O., Perry, D. (2010). Continuous review inventory models for perishable items ordered in batches. *Mathematical Methods of Operations Research*, **72**(2), 217-247. DOI <http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s00186-010-0318-1>
23. Baron, O. (2010). Managing perishable inventory. Invited chapter to the Wiley Encyclopedia of Operations Research and Management Science edited by James J. Cochran (editor-in-chief) Louis Anthony Cox Jr., Pinar Keskinocak, Jefferey Kharoufeh, J. Cole Smith (area editors).
24. Baron, O., Milner, J. (2009). Staffing to maximize profit for call centers with alternate service level agreements. *Operations Research*. **57**, pp685-700.
25. Wu, D., Baron, O., Berman, O. (2009). Bargaining in competing supply chains with uncertainty. *European Journal of Operations Research*, **197**(2): 548-556. DOI <http://dx.doi.org/10.1016/j.ejor.2008.06.032>
26. Baron, O., Berman, O., Krass, D., Kim, S. (2009). Ensuring feasibility in location problems with stochastic demands and congestion. *IIE Transactions*, 1545-8830, **41**(5): 467 – 481.
27. Baron, O., Berman, O., Krass, D. (2008). Facility location with stochastic demand and constraints on waiting time. *Manufacturing and Service Operations Management*, **10** (3): 484-505.
28. Baron, O. (2008). Regulated random walks and the LCFS backlog probability: analysis and applications. *Operations Research*, **56**, pp471-486.
29. Baron, O. (2008). On the law of the  $i^{\text{th}}$  waiting time in a busy period of G/M/c queues. *Probability in the Engineering and Informational Sciences*, **22**, pp75-80.
30. Baron, O., Berman O., Krass D., Wang, Q. (2007). The equitable location problem on the plane. *European Journal of Operations Research*, **183**/2, pp578-590, December 1.
31. Baron, O., Beyer, D., Bitran, G. R. (2004). Pricing of shared computer services. *Journal of Revenue and Pricing Management*, Vol. 4 No 1.

### **Submitted Papers**

1. Wang, J., Abouee Mehrizi, H., Baron, O., Berman, O., Tandem Queues with Impatient Customers.
2. Baron, O., Berman, O., Deutsch, Y., Network design for a service operation with lost demand and possible disruptions
3. Baron, O., Callen, J.L., and Segal, D., Does the bullwhip matter economically? A cross-sectional firm-level analysis
4. Barron, Y., Baron O., Queueing and Markov Chain Decomposition Approach for Perishability Models: The (S,s) Control Policy with Lead Time
5. Abouee-Mehrizi, H., Baron, O., Berman, O., Chen, D., Managing Perishable Inventory Systems with Multiple Demand Classes
6. Diamant A., Baron, O., Double-Sided Matching Queues: Priority and Impatient Customers
7. Baron, O., Berman, O., Nourinejad, M., Economics of Autonomous Vehicles: Formulation and Analysis of Optimal Policies

### **Submitted Papers (Continued)**

8. Baron, O., Berman, O., Fazel-Zarandi, M. M., Roshanaei, V., Almost robust optimization with binary variables
9. Barron, Y., Baron O., The residual time approach for a (Q; r) inventory model with obsolescence, lead time, and lost sales
10. Abouee-Mehrizi, H., Baron, O., Berman, O., Chen, D., Adoption of Electric Vehicles in Car Sharing Market

### **Working Papers**

1. Baron, O. and Naseraldin, H. Robust capacity choice in congested systems
2. Abouee-Mehrizi, H., Baron, O., Berman, O., Chen, D., On the optimal allocation policy in perishable inventory systems

### **Unpublished Note**

3. Baron, O., Berman, O. Nash bargaining with asymmetric bargaining power bargaining over profit in a simple supply chain

### **Papers in Refereed Conferences**

1. The Cost and Benefit of Skipping the Line (w. Li, Y., and Chen, C.) *Manufacturing and Service Operations Management*, Dallas, (forthcoming) July 2018
2. Staffing to Maximize Throughput for a Tandem-Queue Service System with Impatient Customers (w. Abouee Mehrizi, H., Berman, O., Wang, J.). *Manufacturing and Service Operations Management*, Auckland, June 2016
3. Facility Location and Capacity Choice in Congested and Unreliable Systems (w. Deutsch, Y., O., Berman). *Manufacturing and Service Operations Management*, Toronto, June 2015
4. Pricing and Prioritizing Time-Sensitive Customers with Heterogeneous Demand Rates (w. Afeche, P., Milner, J., and Roet-Green, R.). *Manufacturing and Service Operations Management*, Toronto, June 2015
5. Tandem queues with reneging- analysis and insights (w. Abouee Mehrizi, H., Berman, O., Wang, J.). *Manufacturing and Service Operations Management*, Toronto, June 2015
6. Joint Inventory and Contingent Pricing in the Presence of Loss Averse Consumers (w. Hu, M. and Najafi Asadolahi, S.) *Manufacturing and Service Operations Management*, Seattle, June 2014
7. Strategic idling and dynamic scheduling in an open-shop service network: case study and analysis (w. Berman, O., Krass, D., and Wang J.) *Manufacturing and Service Operations Management, Service Management SIG*, Seattle, June 2014
8. Customer Acquisition and Service Quality for a Call Center with Time-Varying Demand Response (w. Afeche, P. and Araghi, M.) *Manufacturing and Service Operations Management*, Seattle, June 2014
9. Using Strategic Idleness to Improve Customer Service Experience in Service Networks (w. Berman, O., Krass, D., and Wang J.) *Manufacturing and Service Operations Management, Service Management SIG*, INSEAD, France, July 2013
10. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P. and Kerner, Y.) *Manufacturing and Service Operations Management*, New-York, NY, June 2012
11. Joint Inventory and Contingent Pricing in the Presence of Loss Averse Consumers (w. Hu, M. and Najafi Asadolahi, S.) *Manufacturing and Service Operations Management*, New-York, NY, June 2012
12. Coordinating Demand Generation and Capacity Management for a Call Center: Optimal Priorities, Promotions, and Staffing (w. Afeche, P. and Araghi, M.) *Manufacturing and Service Operations Management, Service Management SIG*, New-York, New-York, June 2012
13. Strategic Delays in Services (w. Berman, O., Krass, D., and Wang J.) *INFORMS Healthcare 2011*, Montreal, Canada, June 2011
14. Strategic Idleness in Service Networks: Analysis and Motivation (w. Berman, O., Krass, D., and Wang J.) *Manufacturing and Service Operations Management*, Ann-Arbor, Michigan, June 2011

### **Papers in Refereed Conferences (continued)**

15. Robust facility location under service constraints (w. Naseraldin, H.)
  - a. *INFORMS Healthcare 2011*, Montreal, Canada, June 2011
  - b. *Manufacturing and Service Operations Management*, Ann-Arbor, Michigan, June 2011
16. Pricing based on realized performance for time-sensitive services (w. Afeche, P. and Kerner, Y.)
  - c. *INFORMS Revenue Management and Pricing 2011*, Columbia, New-York, June 2011
  - d. *Manufacturing and Service Operations Management*, Ann-Arbor, Michigan, June 2011
17. Reducing waiting time during comprehensive health assessment (w. Berman, O., Krass, D., and Wang J.)
  - a. *Manufacturing and Service Operations Management*, Haifa, Israel, June 2010
  - b. *INFORMS Healthcare 2011*, Montreal, Canada, June 2011
18. Facility Location: A Robust Optimization Approach, (w. Milner J. and **Naseraldin, H.**) *25th Mini-EURO Conference, Uncertainty and Robustness in Planning and Decision Making (URPDM 2010)* Coimbra – Portugal, 15-17 April 2010
19. Now playing: DVD allocation for multiple retailer locations. (w. Hajizadeh, I., Milner, J.) *Manufacturing and Service Operations Management, Service Management SIG*, Boston, June 2009.
20. Staffing to maximize profit for call centers with alternate service level agreements. (w. Milner, J.) *Manufacturing and Service Operations Management*, Atlanta, June 2006
21. Token-bucket pricing for shared services. (w. Beyer, D., Bitran, G., R.)  
*4th INFORMS Revenue Management and Pricing Section Conference*, MIT, June 2004

### **Teaching Experience**

#### **University of Toronto**

**Toronto, ON**

Courses designed and taught:

1. The Art of Modeling with Spreadsheet (Elective MBA) (September-December 2010-2015, Jan-April 2018)  
I have introduced this course that exposes students to the train thought of quantitative, fact- and model-based decision making in 2010. It is now the most popular MBA elective for the Operations Management and Statistics area in the Rotman School.
2. Operations Management (2 years, Core MBA class) (January-April 2009, 2011- 2013)  
This course introduces students to Operations Management and how to effective control and manage the operations of firms. In 2011 I have redesigned this course with Professor Afeche and Milner to improve its fit with the curriculum of this program.
3. Operations Management (3 years, Core MBA class) (May-June 2006, Sep-Nov 2008)  
This course introduces students to Operations Management and how to effective control and manage the operations of firms. In 2006 I have redesigned this course to fit to the 3 year MBA program and its curriculum.
4. Operations Management (Undergraduate class) (January-April 2004-2008)  
This course introduces students to Operations Management and how to effective control and manage the operations of firms. While this course is a version of a previously existing course, I have designed it from scratch, as the previous version did not appropriately fit the students in this program.
5. Queueing Theory (PhD class) (September-December 2013/2015, Jan-April 2018)  
As in the next two PhD courses, I design these courses to give students a solid foundations in the area and the methodologies used in it, expose them to recent developments in the field, and provide them with hands on experience in presenting seminars. Over the years students who took my PhD courses completed several high quality papers using the methodologies they learn there (with or without my direct supervision).
6. Application of Stochastic Process in Manufacturing (PhD class) (Jan-May 2004/2007/2011)
7. Inventory Models (PhD class) (Jan-May 2005/2008)

## **Teaching Experience (continued)**

### **TECHNION, Israel Institute of Technology**

**Haifa, Israel**

Courses designed and taught:

- Advanced Operations Management in Manufacturing (Graduate class) (Oct 09-Jan 10)
  - Advanced Operations Management (Undergraduate class) (Jan-June 2010)
- Teaching Assistant. Industrial Plant Simulation (MBA class) (Mar-July 1998)
- Assisted students with setting a strategy for their virtual firms, evaluated students' decisions.

### **Massachusetts Institute of Technology**

**Cambridge, MA**

Teaching Assistant. Introduction to Operations Management (MBA class) (Jan-May 2001)

- Evaluated MBA students' class participation and graded their course projects

## **Cases**

- Wang J. and Baron O. (2017) *Waiting for Doctor Zhivago*. The case is targeted at students in business analytics, operations management, and service operations classes. The case introduces students to Psychology of Queues in general and Strategic Idleness in queueing service networks in particular. It is based on data work with an undisclosed company and two papers on Strategic Idling (with Berman and Krass).

## **Participation in Teaching Workshops**

- University of Toronto, the Rotman School of Management a two days teaching with cases workshop.
- University of Western Ontario, the Richard Ivey School of Business a three days teaching with cases seminar.
- MIT, Sloan School of Management the Teaching Forum Roadshow, a two days teaching effectiveness seminar.

## **Research Supervision**

Post doctorate fellows:

1. Mehdi Nourinejad (2017- Present) Jointly supervised with Berman, O. Project titled: Impact of Shared Autonomous Vehicles on Travel Demand and Congestion
2. Vahid Roshanaei (2017- Present) Jointly supervised with Berman, O. Project titled: Collaborative patient-mix planning in the presence of elective and multi-class emergency patients.
3. Rui (David) Chen (2015- 2017) Jointly supervised with Aboue-Mehrizi, H. and Berman, O. Project titled: Optimal Inventory Control for Perishable Items with Multiple Customer Types  
Current position: Assistant professor at School of Management and Economics, Chinese University of Hong Kong, Shenzhen.
4. Deutsch, Yael (2013- 2015). Jointly supervised with Berman, O. and Dmitry Krass (Professor Krass joined in 2015) Project titled: Reliability Congestion Models.  
Current position: Assistant Professor, Bar-Ilan University, Israel.
5. Ricky Roet-Green (2013- 2014). Jointly supervised with Afeche, P. and Milner, J. Project titled: Queueing Games with several customers types.  
Current position: Assistant Professor, Simon Business School, University of Rochester.
6. Wang, Jianfu (Jeff) (2013- 2014). Jointly supervised with Aboue-Mehrizi, H. and Berman, O. Project titled: Tandem Queues with Reneging (I did not fund Dr. Wang's post doctorate).  
Current position: Assistant Professor, Nanyang Business School, Nanyang Technological University, Singapore.
7. Kai Luo (2011-2012). Jointly supervised with Milner, J. Project titled: Sales Operations to Meet Planning.  
Current position: Associate Professor, Paris School of Business, France.

## **Research Supervision (continue)**

### **Post doctorate fellows (continue):**

8. Najafi Asadolahi Sami (2011-2013). Jointly supervised with Hu, M. Project titled: Selling to Loss Averse Customers.  
Current position: Assistant Professor University of Santa Clara, Santa Clara, CA.
9. Kerner, Yoav (2009-2010). Project titled: Queueing Applications in Operations Management  
Current Position: Assistant Professor at the *Ben Gurion University of the Negev*, Beer-Sheva, Israel.
10. Naseraldin, Hussein (2007-2008). Jointly supervised with Milner, J. Project titled: Facility location: A robust optimization approach.  
Current Position: Associate Professor at the *ORT Braude College*, Nazareth Ilit, Israel.
11. Wu, Desheng (2006-2007). Jointly supervised with Berman, O. Project titled: Supply chain coordination within an industry – Nash bargaining approach.  
Associate Dean, University of Chinese Academy of Science, School of Economics and Management, Beijing, China.
12. Qian Wang (2004/2005). Jointly supervised with Berman, O., Krass, D. Project titled: The equitable location problem on the plane (I did not fund Dr. Qian's post doctorate).

### **PhD Students Supervision:**

Currently, I am co-supervising the PhD work of Tianshu Wang, Sinem Savaser, and Yu Wu (of UCAS, Beijing). Graduated Students (jointly supervised) are:

13. "Operations management of crowdsourcing and crowd behavior" by Lu Wang, Rotman School of Management, University of Toronto (2017).

Current position: Assistant Professor, Shanghai University of Finance and Economics, Shanghai, China.

14. "Incentives in Supply Chain Management" by Mohammad Mahdi Fazel Zarandi, Rotman School of Management, University of Toronto (2016).

Current position: Post-Doc Yale University, New Haven, Connecticut.

15. "Managing Perishability in Service Operations" by Vahid Sarhangian, Rotman School of Management, University of Toronto (2015).

Current position: Assistant Professor, University of Toronto, Mechanical and Industrial Engineering, Toronto, ON.

16. "Problems in Service Operations with Heterogeneous Customers" by Mojtaba Araghi, Rotman School of Management, University of Toronto (2014).

Current position: Assistant Professor, ODS, Wilfrid Laurier University, Waterloo, ON

17. "Scheduling Policies in Service Networks" by Jianfu Wang Rotman School of Management, University of Toronto (2014).

Current position: Assistant Professor, Nanyang Business School, Nanyang Technological University, Singapore.

18. "Managing Inventory, Transportation and Location in a Supply Chain," by Hossein Abouee-Mehrzi Rotman School of Management, University of Toronto (2011).

Current position: Assistant Professor, University of Waterloo, Waterloo, ON.

19. "Problems in Supply Chain Location and Inventory under Uncertainty," by Iman Hajizadeh, Rotman School of Management, University of Toronto (2010).

Current Position: Chief Operating Officer and Co-founder, Blanclink

20. "Optimal Pricing and Capacity Planning in Operations Management," by Dehui Tong, Rotman School of Management, University of Toronto (2010).

21. "Service level commitment in location models with stochastic demands and congestion," by Seokjin Kim, Rotman School of Management, University of Toronto (2005).

Current position: Associate Professor, Suffolk University, Boston, MA.



## Research Supervision (continue)

### External PhD Dissertations committee member

22. "Pricing and Matching in the sharing economy" by Yun Zhou, Rotman School of Management, University of Toronto (2017).
23. "Three Essays in Technology and Revenue Management" by Sam Kirshner, School of Business, Queen's University (Kingston ON) (2014).
24. "Three Essays in Operations Management," by Dror Z. Hemel, The Faculty of Graduate studies (Business Administration), The University of British Columbia (Vancouver) (2013).
25. "Options, contracts, and exogenous prices in applied revenue management," by Benjamin Marcus, Ivey School of Business, University of Western Ontario (2007).
26. "Leveraging remote communication in the service industry," by Hao Qian, Rotman School of Management, University of Toronto (2005).

### Master Thesis committee member

27. "An EOQ-Type Model with a Probabilistic One-Time Unit-Price Discount" by Yaron Shaposhnik, The Technion Israeli Institute of Technology (2010).
28. "Machine interference models: an investigation into non-Markovian failure and repair models" by Kelly Kinahan, the University of Toronto, Mechanical and Industrial Engineering (2008).

### MBA Projects Supervision

Spring 2018 Data analytics for a medication provider

Summer 2013 Residential owner services for a hotel chain

Summer 2012 Operations and finance in a hotel chain

## Popular Press

1. Comments on How Much is That Call Worth: How to Tailor Service Levels (paper with Afeche and Araghi) <http://martellusgroup.com/2018/02/>
2. St. Catherines radio station **610 CKTB** (December 12, 2013) discussing Canada Post phasing out of Urban mail delivery.
3. Toronto Star (June 28, 2011) Remarks on Canada Post operations.
4. The following highlighted the paper "Facility location with stochastic demand and constraints on waiting time":
  - Di Meglio, F. (2007). B-School Profs Want to Know: Can we cut consumer wait time? Are there incentives for garages to cheat on auto inspections? Why does Disney World remain so expensive? BusinessWeek.Com, October.
  - Mintz, P. (2007). The B-School channel editor letter, October 10th, BusinessWeek.Com.
  - Rotman, the magazine of the Rotman School, Winter 2008.
  - NewThinking@Rotman website at [www.rotman.utoronto.ca/newthinking](http://www.rotman.utoronto.ca/newthinking).
5. Belford, T. (2007). Globe and Mail, Report on Business, Innovation, "Do the math, Algorithms Rule" "Where best to set up shop? Do the Math." November 13. Highlighting my work on facility location.
6. Organization Theory and Design, Daft's U.S. book, 9th edition. Canadian version edited by Ann Armstrong. Management science section from chapter 12 on decision-making, discuss the application of Algorithms in today's world based on my work.

## Invited Seminars

1. Redesigning the Emergency Department (ED): Lessons from ED at Southlake RHC (w. Krass, Lu, and Duic). Shanghai University of Finance Economics, School of Information Management and Engineering, June 2018.
2. Queueing and Markov Chain Decomposition (*QMCD*), the Single Stage Subsystems Case: Motivation and Examples  
Shanghai University of Finance Economics, School of Information Management and Engineering, Dec. 2016  
York University, Probability Seminar, Sept. 2017  
McMaster University, DeGroot School of Management, Oct. 2017  
University of Chicago, Booth School of Business, Operations Management seminar Nov 2017
3. A Game between a Terrorist and a Passive Defender, The Israeli Palestinian Conflict in the Gaza Strip (w. Berman, O. and Gavious, A).  
Nanyang Technological University, Singapore, Information Technology and Operations Management, Mar. 2017  
University Chinese Academy of Science, School of Economics and Management, Jan. 2017  
Shanghai University of Finance and Economics, Operations Management Seminar, Feb. 2017
4. Queueing and Markov Chain Decomposition (*QMCD*): Motivation and Examples.  
Tel-Aviv University, School of Mathematical Science, August 2017.  
Indian School of Business, Operations Management Seminar, Jun. 2017.  
National University of Singapore, Decision Science Seminar, Mar. 2017  
University of Southern California, Marshall School of Business, Apr. 2016  
Wilfrid Laurier University, Lazaridis School of Business and Economics, **CN Distinguished Speaker series**, Dec. 2015
5. Reducing the age of transfused red blood cells in hospitals: ordering and allocation policies (w. Abouee Mehrizi, H., Baron, O., Berman, O., Sarhangian, V.) University of Waterloo, Waterloo, ON, February 2015.
6. Facility Location and Capacity Choice in Congested and Unreliable Systems (w. Deutsch, Y, O., Berman).  
The Hebrew University, Jerusalem Israel, February 2015  
Ben Gurion University of the Negev, Beer Sheva, Israel, IE&M Departmental Seminar, February 2015
7. Pricing and Prioritizing Time-Sensitive Customers with Heterogeneous Demand Rates (w. Afeche, P., Milner, J., and Roet-Green, R.)  
Stanford University, March 2015  
USC, Marshall School of Business, March 2015  
University of California Berkeley, March 2015  
The Hebrew University, Jerusalem Israel, February 2015  
Rochester University, Rochester NY, February 2015
8. From Product Form Queues to Queue Decomposition: The State-Dependent Mn/Gn/1 Example (w. Abouee Mehrizi, H.). University at Buffalo, State University of New-York, Industrial and Systems Engineering, Buffalo, NY, October 2014.
9. A game between a terrorist and a defender (w. Berman, O. and Gavious A.). University of Waterloo, Waterloo, ON, November 2013.
10. Strategic idling and dynamic scheduling in an open-shop service network: case study and analysis (w. Berman, O., Krass, D., and Wang J.)  
Nanyang Technological University in Singapore, November 14 2013.  
City University of Hong Kong, November 8 2013.  
Singapore Management University, November 12 2013.
11. Allocation Policies in Blood Transfusion (w. Abouee Mehrizi, H Berman, O., Sarhangian, V.) Rotman School of Management, the University of Toronto, Toronto, ON, May 2013
12. Coordinating Marketing Promotions and Staffing Policies for a Call Centre. (w. Afeche, P., Araghi, M.) Wilfrid Laurier, Waterloo, ON, January 2013
13. Strategic Idling in a Job-shop Queueing Healthcare Network—Analysis and Justification (w. Berman, O., Krass, D., and Wang J.) Wilfrid Laurier University, Waterloo, ON, January 2013
14. Strategic Idling in a Job-shop Queueing Healthcare Network—Analysis and Justification (w. Berman, O., Krass, D., and Wang J.) University of Waterloo, Waterloo, ON, January 2013

### **Invited Seminars (continued)**

15. Exact Analysis of Preemptive Multi-priority M/M/n queue with different processing times. (w. Wang, J.).  
Carnegie Mellon University, Pittsburgh (March, 2012)
16. DVD allocation for a multiple-location rental firm. (w. Hajizadeh, I., Milner, J.)  
Technion Israel Institute of Technology - Industrial Engineering Seminar (Nov. 2009)  
IBM Research Lab, Haifa, Israel – Computer Science Applications Seminar (May 2010)
17. Strategies for a Centralized M/G/1 make-to-stock queue (w. Abouee Mehrizi, H., Balcioglu, B.)  
Technion Israel Institute of Technology - Operations Research Seminar (March 2010)  
The Hebrew University, Jerusalem, Israel -Statistics Seminar (May 2010)  
Ben Gurion University of the Negev, Beer Sheva, Israel, IE&M Departmental Seminar (June 2010)  
University of Waterloo, Waterloo, Management Science Seminar (February, 2011)
18. Strategies for an M/G/1 make-to-stock queue serving different markets. (w. Abouee Mehrizi, H., Balcioglu, B.)  
University of Michigan, Ross school of Management (December 2008)  
Northwestern University, Kellogg School of Management (February 2009)  
University of Toronto, Rotman School of Management (March 2009)
19. Stochastic ( $\tau, S$ ) inventory models for perishable items. (w. Berman, O., Perry, D.)  
Technion Israel Institute of Technology - Operations Research Seminar (July 2008)  
Haifa University – Statistics Seminar (July 2008)  
Massachusetts Institute of Technology – Operations Management Seminar (Oct 2008)
20. Staffing to maximize profit for call centers with alternate service level agreements. (w. Milner, J.)  
Technion Israel Institute of Technology - Operations Research Seminar (Apr 2006)  
Massachusetts Institute of Technology - Operations Management Seminar (May 2006)  
Ben-Gurion University - Industrial Engineering and Management Seminar (June 2007)  
Tel-Aviv University - Industrial Engineering Seminar (July 2007)  
Haifa University – Statistics Seminar (July 2007)  
Waterloo University – Management Science Seminar (Oct 2007)
21. Facility location with stochastic demand and constraints on waiting time. (w. Berman, O., Krass, D.)  
Wilfrid Laurier University – Operations and Decision Sciences Seminar (Nov 2005)  
Technion Israel Institute of Technology - Industrial Engineering Seminar (July 2007)
22. The buyer's problem when facing the token bucket pricing scheme. (w. Bitran, G. R.)  
Massachusetts Institute of Technology – Operations Management Seminar (Jan 2003)  
Technion Israel Institute of Technology – Operations Research Seminar (Feb 2003)  
Tel-Aviv University – Operations Research Seminar (Feb 2003)
23. The token bucket as pricing schemes for shared computer services.  
Queens University – Management Science Seminar (Feb 2003)  
Wilfrid Laurier University – Operations and Decision Sciences Seminar (Feb 2003)  
Western Ontario University – Decision Science Seminar (Mar 2003)  
University of Toronto – Operations Management Seminar (Mar 2003)  
IBM, T. J. Watson Research Center NY – Operations Research Seminar (Aug 2003)

### **Invited Conference Presentations**

24. The Impact of Repeat Business and Word of Mouth for an E-Retailer (w. He and Yuan) INFORMS Annual Meeting, Phoenix, Nov.4-7, 2018 (forthcoming)
25. Does the bullwhip matter economically? A cross-sectional firm-level analysis (w. Callen and Segal) INFORMS Annual Meeting, Phoenix, Nov.4-7, 2018 (forthcoming)
26. Economics of Autonomous Vehicles: Formulation and Analysis of Optimal Policies (w. Berman and Nourinejad) INFORMS Annual Meeting, Phoenix, Nov.4-7, 2018 (forthcoming)
27. Staffing Tandem Queues with Impatient Customers – Application in Financial Service Operations (w. Wang, Abouee-Mehrizi and Berman), ECQT, Jerusalem, Israel, July 2-4 2018 (forthcoming)
28. Noodge, or when to check back for a daycare spot (w. Milner) *CORS Annual Meeting*, Halifax June 4-6, 2018
29. Redesigning the Emergency Department (ED): Lessons from ED at Southlake RHC (w. Krass, Lu, and Duic),
  - a. *CORS Annual Meeting*, Halifax June 4-6, 2018
  - b. *Rotman roundtable on healthcare analytics*, Toronto, May 2018

**Invited Conference Presentations (continued)**

30. Robust multi-period home healthcare provider facility location-allocation problem under demand uncertainty (w. Berman and Roshanaei), *POMS Annual meeting*, Houston, May 4-7 2018
31. Case study on waiting time reduction in emergency department (w. Wang and Krass) *INFORMS annual meeting*, Houston. 22-25 October 2017.
32. Redesigning the Emergency Department: Lessons from ED at Southlake RHC (w. Duic, Wang and Krass) *INFORMS Healthcare 2017*, Rotterdam. 26-28 July 2017.
33. Queueing and Markov chain decomposition approach for perishability models: the (S,s) control policy with lead time (w. Barron)  
POMS international conference Tel-Aviv, Israel, June 27-29, 2017.  
APS Evanston, IL, July 10-12, 2017.
34. Capacity and location decisions in the presence of congestion (w. Deutsch and Berman) POMS international conference Tel-Aviv, Israel, June 27-29, 2017.
35. A game between a terrorist and a passive defender (w. Gavius and Berman) ORSIS-2017 Tel-Aviv, Israel, May 21-22.
36. Service network design under congestion (w. Berman and Deutsch) ORSIS-2017 Tel-Aviv, Israel, May 21-22.
37. Managing perishable inventory systems with multiple demand classes. (w. Chen, Abouee-Mehrzi, and Berman) *INFORMS annual meeting*, Nashville. 13-16 November 2016.
38. Aggregate variation under network perturbation. (w. Hu and Malekian) *INFORMS annual meeting*, Nashville. 13-16 November 2016.
39. The M/G/1 constant retrial queue with state dependent arrivals and services. (w. Economou and Manou) The 11th International Workshop on Retrial Queues and Related Topics (WRQ11), Amsterdam, Aug. 31-Sept. 2, 2016.
40. Managing Perishable Inventory Systems with Multiple Demand Classes. (w. Abouee-Mehrzi, Berman, and Chen) CORS, Banff, 2016.
41. Strategic Idling and dynamic scheduling in open-shop service networks: case study and analysis. (w. Berman, Krass, and Wang)  
Information Systems, Logistics, and Supply Chain (ILS) 2016, Bordeaux, France, June 1-4, 2016.  
Israeli Operations Research Society, ORSIS, 2016, 29-30 May 2016.
42. Pricing and Prioritizing Time-sensitive Customers with Heterogeneous Demand Rates (w. Afeche, Milner, and Roet-Green,) Israeli Operations Research Society, ORSIS, 2016, 29-30 May 2016.  
EURO, European Conference on Operational Research, University of Strathclyde, Glasgow, July 12-15, 2015.
43. From Product Form Queues to Queue and MC Decomposition: The State-Dependent Mn/Gn/1 Example (w. Abouee-Mehrzi) *INFORMS annual meeting*, Philadelphia. 1-4 November 2015.
44. Pricing and Prioritizing Time-sensitive Customers with Heterogeneous Demand Rates (w. Afeche, Milner, and Roet-Green,) *INFORMS annual meeting*, Philadelphia. 1-4 November 2015.
45. Tandem Queues with Reneging (w. Abouee-Mehrzi, Berman, and Wang) *INFORMS annual meeting*, Philadelphia. 1-4 November 2015.
46. M/M/c Queue with Two Priority Classes (w. Wang, and Scheller-wolf,) *INFORMS annual meeting*, Philadelphia. 1-4 November 2015.
47. A game between a terrorist and a defender (w. Berman and Gavius). *The Second Conference on Validating Models of Adversary Behaviors*, Buffalo/NiagraFalls, August 2-5., 2015.
48. How to charge and prioritize time-sensitive customers with heterogeneous demand rates (w. Afeche, P., Milner, J., and Roet-Green, R.) *INFORMS, Applied Probability Conference*, Istanbul, Turkey, July 5-8, 2015.
49. Tandem queues with renegeing- analysis and insights (w. Abouee Mehrzi, H., Berman, O., Wang, J.,). *INFORMS, Applied Probability Conference*, Istanbul, Turkey, July 5-8, 2015.
50. How to charge and prioritize time-sensitive customers with heterogeneous demand rates (w. Afeche, P., Milner, J., and Roet-Green, R.) *INFORMS 2014*, San Francisco, CA, November, 2014.
51. Capacity and Location Decisions in the presence of congestion and disruptions (w. Deutsch, Y. and Berman, O.) *INFORMS 2014*, San Francisco, CA, November, 2014.
52. Robust Capacity Planning Under Service Constraints (w. Naseraldin, H.), *INFORMS 2014*, San Francisco, CA, November, 2014.

**Invited Conference Presentations (continued)**

53. Allocation Policies in Blood Transfusion (w. Abouee Mehrizi, H Berman, O., Sarhangian, V), *INFORMS* 2014, San Francisco, CA, November, 2014.
54. Newsvendor Selling to Loss Averse Consumers with Stochastic Reference Points (w. Hu, M., Najafi Asadolahi, S., and Qu Qian) *INFORMS annual meeting*, San Francisco. 9-12 November 2014.
55. Tandem Queues with Reneging (w. Abouee-Mehrizi, H., Berman, O., and Wang, J.) *INFORMS annual meeting*, San Francisco. 9-12 November 2014.
56. Newsvendor Selling to Loss Averse Consumers with Stochastic Reference Points (w. Hu, M., Najafi Asadolahi, S., and Qu Qian) POMS International Conference 2014, July21 - 23, 2014, Marina Bay Sands, Singapore.
57. Tandem Queue with Reneging (w. Abouee Mehrizi, H., Berman O. and Wang J.) *CORS* 2014, Ottawa, Canada, May 2014.
58. Analysis of Novel Control Policies for Blood Bank Inventory (w. Abouee Mehrizi, H Berman, O., Sarhangian, V), *CORS* 2014, Ottawa, Canada, May 2014.
59. Queue Decomposition and its Applications in State-Dependent Queueing Systems (w. Abouee Mehrizi, H), *CORS* 2014, Ottawa, Canada, May 2014.
60. Newsvendor Selling to Loss Averse Consumers with Stochastic Reference Points (w. Hu, M., Najafi Asadolahi, S., and Qu Qian) *POMS-HK* The University of Hong Kong, Hong Kong. 3-4 January 2014.
61. Customer Acquisition, Retention, and Service Quality in a Call Center (w. Afeche, P., Araghi, M.) *INFORMS Annual Meeting*, Minneapolis, Minnesota, October 2013
62. Analysis of State-Dependent Queues (w. Abouee Mehrizi, H), *INFORMS Annual Meeting*, Minneapolis, Minnesota, October 2013
63. Joint Inventory and Contingent Pricing in the Presence of Loss Averse Consumers (w. Hu, M. and Najafi Asadolahi, S.) *INFORMS Annual Meeting*, Minneapolis, Minnesota, October 2013
64. Analysis of Novel Control Policies for Blood Bank Inventory (w. Abouee Mehrizi, H Berman, O., Sarhangian, V.) *INFORMS Annual Meeting*, Minneapolis, Minnesota, October 2013
65. Strategic Idling in a Job-shop Queueing Healthcare Network—Analysis and Justification (w. Berman, O., Krass, D., and Wang J.) *INFORMS Annual Meeting*, Minneapolis, Minnesota, October 2013.
66. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P., Kerner, Y.) *EURO/INFORMS*, Rome, Italy, July 2013.
67. Using Strategic Idleness to Improve Customer Service Experience in Service Networks (w. Berman, O., Krass, D., and Wang J.) June 2013 *INFORMS Healthcare Conference- Chicago*.
68. Allocation Policies in Blood Transfusion (w. Abouee Mehrizi, H Berman, O., Sarhangian, V.) June 2013 *INFORMS Healthcare Conference- Chicago*.
69. Customer Acquisition, Retention, and Service Quality for a Call Center: Optimal Promotions, Priorities, and Staffing- Special Session for Finalists of the CORS 2013 Student Paper Competition (Open Category) (supervising w. Afeche, P. the work of Araghi, M.) *CORS* 2013, Vancouver, Canada, May 2013.
70. Customer Acquisition, Retention, and Service Quality for a Call Center: Optimal Promotions, Priorities, and Staffing (w. Afeche, P. and Araghi, M.) *CORS* 2013, Vancouver, Canada, May 2013
71. Analysis of State-Dependent Queues (w. Abouee Mehrizi, H), *CORS* 2013, Vancouver, Canada, May 2013
72. Reducing waiting time during comprehensive health assessment (w. Berman, O., Krass, D., and Wang J.) *INFORMS*, Phoenix, AZ, October 2012
73. Exact Analysis of Preemptive Multi-priority M/M/n queue with different processing times. (w. Wang, J.). *INFORMS*, Phoenix, AZ, October 2012
74. Coordinating Marketing Promotions and Staffing Policies for a Call Centre. (w. Afeche, P., Araghi, M.) *INFORMS*, Phoenix, AZ, October 2012
75. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P. and Kerner, Y.) *INFORMS*, Phoenix, AZ, October 2012
76. Joint Inventory and Contingent Pricing in the presence of Loss Averse Consumers. (w. Hu, Ming, Najafi S.) *INFORMS*, Phoenix, AZ, October 2012
77. Exact Analysis of the Mn/Gn/1 Model (w. Abouee Mehrizi, H) *Canadian Operations Research Society*, *CORS*, Niagara Falls, ON, June 2012. Reducing waiting time during comprehensive health assessment (w. Berman, O., Krass, D., and Wang J.) *Canadian Operations Research Society*, *CORS*, Niagara Falls, ON, June 2012.

**Invited Conference Presentations (continued)**

78. Exact Analysis of Preemptive Multi-priority M/M/n queue with different processing times. (w. Wang, J.) *Canadian Operations Research Society, CORS, Niagara Falls, ON, June 2012.*
79. Coordinating Marketing Promotions and Staffing Policies for a Call Centre. (w. Afeche, P., Araghi, M.) *Canadian Operations Research Society, CORS, Niagara Falls, ON, June 2012.*
80. Customer Differentiation in Capacitated Multi-Echelon Inventory Systems. (w. Abouee Mehrizi, Berman, O.) *Canadian Operations Research Society, CORS, Niagara Falls, ON, June 2012.*
81. Joint Inventory and Contingent Pricing in the presence of Loss Averse Consumers. (w. Hu, Ming, Najafi S.) *Canadian Operations Research Society, CORS, Niagara Falls, ON, June 2012.*
82. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P. and Kerner, Y.) *POMS, Chicago, Illinois, April 2012*
83. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P. and Kerner, Y.) *INFORMS, Charlotte, NC, 2011*
84. Coordinating Marketing Promotions and Staffing Policies for a Call Center (w. Afeche, P. and Araghi, M.) *INFORMS, Charlotte, NC, 2011*
85. Strategies for a Single Product Multi-Class M/G/1 Make-to-Stock Queue Serving Different Markets (w. Abouee Mehrizi, H., Balcioglu, B.) *INFORMS, Charlotte, NC, 2011*
86. A queueing approach to multi-class M/G/1 make-to-stock with backlog. (w. Kerner, Y.) *Israeli Operations Research Society, ORSIS, 2011, 29-30 May 2011*
87. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P. and Kerner, Y.) *Second Israeli-Dutch Workshop on Queueing Theory Eindhoven, Netherlands, September 29 - October 1, 2010*
88. A novel approach to control a multi-class M/G/1 make-to-stock queue. (w. Kerner, Y.) *The YEQT-III (Young European Queueing Theorists) workshop on Scheduling and Resource Sharing in Queueing Networks, Eindhoven, Netherlands, November 19-21, 2009*
89. Location Models for Emergency Servers with Two Demand Classes. (w. Berman, O., Krass, D., Kim, S.) *INFORMS, San Diego, CA, 2009*
90. Strategies for a Single Product Multi-Class M/G/1 Make-to-Stock Queue Serving Different Markets. (w. Abouee Mehrizi, H., Balcioglu, B.) *INFORMS, San Diego, CA, 2009*
91. Strategies for an M/G/1 make-to-stock queue serving different markets. (w. Abouee Mehrizi, H., Balcioglu, B.) *CORS/INFORMS Toronto, ON, 2009*
92. DVD allocation for a multiple-location rental firm. (w. Hajizadeh, I., Milner, J.) *CORS/INFORMS Toronto, ON, 2009*
93. Intertemporal pricing for a capacity constrained just-in-time supply chain. (w. Milner, J., Tong, D.) *CORS/INFORMS Toronto, ON, 2009*
94. Bargaining in the supply chain and its implication to coordination of supply chains in an Industry. (w. Berman, O., Wu, D.) *CORS/INFORMS Toronto, ON, 2009*
95. Facility Location: A Robust Optimization Approach. (w. Milner, J. and Naseraldin, H.) *The Fourth ORT Braude College Interdisciplinary Research Conference, October 22-23, 2008, Nazareth Ilit, Israel.*
96. Managing inventory of perishable items. (w. Berman, O., Perry, D.) *INFORMS, Washington, DC, 2008*
97. DVD allocation for a multiple-location rental firm. (w. Hajizadeh, I., Milner, J.) *INFORMS, Washington, DC, 2008*
98. Intertemporal pricing for a capacity constrained just-in-time supply chain. (w. Milner, J., Tong, D.) *INFORMS, Washington, DC, 2008*
99. Strategies for an M/G/1 make-to-stock queue serving different markets. (w. Abouee Mehrizi, H., Balcioglu, B.) *INFORMS, Washington, DC, 2008*
100. The network design of spatially distributed service systems with two prioritized call classes. (w. Berman, O., Krass, D., Kim, S.) *INFORMS, Washington, DC, 2008*
101. Bargaining in the supply chain and its implication to coordination of supply chains in an Industry. (w. Berman, O., Wu, D.) *INFORMS, Seattle, 2007*
102. Staffing to maximize profit for call centers with alternate service level agreement. (w. Milner, J.) *INFORMS, Pittsburgh, 2006*
103. On the law of the  $i^{\text{th}}$  waiting time in a busy period of the G/M/1 queue. *INFORMS, Pittsburgh, 2006*

### **Invited Conference Presentations (continued)**

104. Locating mobile servers under stochastic demand and congestion. (w. Berman, O., Krass, D., Kim, S.) *INFORMS*, Pittsburgh, 2006
105. Facility location with stochastic demand and constraints on waiting time. (w. Berman, O., Krass, D.) *CORS Optimization Days*, Montréal, 2006  
*GERAD 25th Anniversary*, Montréal, 2005
106. Facility location with stochastic demand and constraints on waiting time – the planner case. (w. Berman, O., Krass, D.) *INFORMS New-Orleans / San-Francisco*, 2005
107. Strategic decisions in congested networks. (w. Berman, O., Krass, D.) *IFORS*, Hawaii, 2005
108. The influence of shortages cost on optimal pricing. *IFORS*, Hawaii, 2005
109. Call center staffing to exceed service expectations. (w. Milner, J.)  
*INFORMS*, New-Orleans / San-Francisco, 2005  
*INFORMS, Applied Probability Conference*, Ottawa, 2005
110. Stochastic location of facilities on a line. (w. Berman, O., Krass, D.) *INFORMS*, Denver, 2004

### **Conference Contributed Presentations**

1. Capacity Rationing And Ambulance Diversion In Emergency Departments (w. Krass and Lu) *INFORMS Annual Meeting*, Phoenix, Nov.4-7, 2018 (forthcoming)
2. Adoption of Electric Vehicles in Car Sharing Market (w. Abouee-Mehrzi, Berman, and Chen) 2018 The Eleventh Annual International Conference of Chinese Scholars Association for Management Science and Engineering
3. Managing Perishable Inventory Systems with Multiple Demand Classes (w. Abouee-Mehrzi, Berman, and Chen) 2018 The Eleventh Annual International Conference of Chinese Scholars Association for Management Science and Engineering
4. The Cost and Benefit of Skipping the Line (w. Chen and Li) 2018 The Eleventh Annual International Conference of Chinese Scholars Association for Management Science and Engineering
5. Redesigning the Emergency Department (ED): Lessons from ED at Southlake RHC (w. Lu and Krass) 2018 *INFORMS International Conference Taipei*, Taiwan, June 17-20, 2018
6. Capacity Rationing And Ambulance Diversion In Emergency Departments (w. Lu and Wang) 2018 *INFORMS International Conference Taipei*, Taiwan, June 17-20, 2018
7. Queueing and Markov Chain Decomposition Approach for Perishability Models: The (S,s) Control Policy with Lead Time (w. Barron Y.) Lancaster, UK. June 16-18, 2018
8. Robust Capacity Planning Under Service Constraints (w. Nasraddin H.)
  - a. POMS international conference Tel-Aviv, Israel, June 27-29, 2017.
  - b. European conference on stochastic optimization, ECSO 2017, 20-22 September 2017, ROME (Italy)
9. Pricing and Prioritizing Time-Sensitive Customers with Heterogeneous Demand Rates (w. Afeche, P., Milner, J., and Roet-Green, R.) 2016 *INFORMS Revenue Management and Pricing Conference*, NYU Stern School of Business. (16-17 Jun 2016)
10. Robust Capacity Planning Under Service Constraints --- the M/G/1 Case (w. Nasraddin, H.) 2016 19th International Symposium on Inventories, Budapest, May 2016.
11. Strategic Idling and Dynamic Scheduling in Open-Shop Service Network: Case Study and Analysis (w. Berman, O., Krass, D., and Wang J.) Multidisciplinary International Scheduling Conference, MISTA 2015, Prague, Czech Republic (25-28 Aug 2015).
12. Queueing Model for Safety Stock Inventory Model with Perishable Items and General Distribution (w. Y. Kerner) *Israeli Operations Research Society, ORSIS, 2015*, 10-11 May 2015.
13. Strategic Idling and Dynamic Scheduling in Open-Shop Service Network: Case Study and Analysis (w. Berman, O., Krass, D., and Wang J.) Western decision Sciences Institute annual meeting, Maui April 2015.
14. Customer Acquisition and Service Quality for a Call Center with Time-Varying Demand Response (w. Afeche, P., Araghi, M.) *INFORMS 2014*, San Francisco, CA, November, 2014.
15. Strategic Idling and Dynamic Scheduling in an Open-shop Service Network (w. Berman, O., Krass, D., and Wang J.) *OSCM 2014, 6th International Conference on Operations and Supply Chain Management*, Bali, Indonesia, December 10-12 2014.

### **Conference Contributed Presentations (continued)**

16. Queue Decomposition and its Applications in State-Dependent Queueing Systems (w. Abouee-Mehrzi H.) *ECQT 2014, First European Conference on Queueing Theory*, Ghent, Belgium, August 20-22 2014.
17. Analysis of Novel Control Policies for Blood Bank Inventory (w. Abouee Mehrzi, H Berman, O., Sarhangian, V), *POMS 2014*, Atlanta, GA, May, 2014.
18. Robust Capacity Planning Under Service Constraints (w. Naseraldin, H) *Israeli Operations Research Society, ORSIS, 2014, 22/23 April 2014*.
19. Pricing Time-Sensitive Services Based on Realized Performance (w. Afeche, P. and Kerner, Y.) *Israeli Operations Research Society, ORSIS, 2012, 3-4 June 2012*
20. Strategic Delays in Services (w. Berman, O., Krass, D., and Wang J.) *INFORMS Applied Probability Society Conference 2011*, Stockholm, Sweden, June 2011
21. A novel approach to control a multi-class M/G/1 make-to-stock queue. (w. Kerner, Y.) *INFORMS Applied Probability Society Conference 2011*, Stockholm, Sweden, June 2011
22. A queueing approach to multi-class M/G/1 make-to-stock with backlog. (w. Kerner, Y.) *Israeli Operations Research Society, ORSIS, 2011, 29-30 May 2011*
23. Facility Location: A Robust Optimization Approach, Israeli Operations Research Society, (w. Milner J. and Naseraldin H.) *ORSIS, 2010, 2-3 June 2010*
24. Strategies for a single product M/G/1 multi-class make-to-stock queue. (w. Abouee Mehrzi, H., Balcioglu, B.) *EURO (23<sup>rd</sup> European Conference on Operational Research)*, Bonn, 2009
25. Stock allocation for multi-class singles-server queues with general service. (w. Abouee Mehrzi, H., Balcioglu, B.) *EURO (The Association of European Operational Research Societies) Working Group on Stochastic Modeling*, Koc University, Istanbul, 2008
26. Static and dynamic pricing of an EOQ model with state dependent demand. (w. Berman, O., Perry, D.) *INFORMS Applied Probability Conference*, Eindhoven, Netherlands, 2007
27. Staffing to maximize profit for call centers with alternate service level agreements. (w. Milner, J.) *Second Madrid Conference on Queueing Theory, MCQT*, Madrid, 2006
28. Characterizing the output process of token bucket admission controls. (w. Bitran, G. R.) *INFORMS*, Atlanta, 2003
29. Token bucket pricing scheme for computer services. (w. Bitran, G. R.) *INFORMS*, San-Jose, 2002

### **Additional Experience**

#### **HP Labs**

**Palo-Alto, CA**

Supervisor: Dirk Beyer

Summer Intern (June - August 2002)

- Investigated the applicability of a token-bucket pricing scheme for the pricing of shared computer resources.

#### **Massachusetts Institute of Technology**

**Cambridge, MA**

Supervisor: Gabriel R. Bitran

Research Assistant (December 2001- June 2003)

- Explored the subject of pricing shared services. This involved a survey of the literature on network pricing, interviews with practitioners, a new idea for a pricing scheme, and mathematical modeling and analysis of the suggested scheme.

Supervisor: Lawrence M. Wein

Research Assistant (September - December 2001)

- Explored the subject of demand learning in periodic multi-item auctions.

#### **TEFEN LTD, Industrial Engineering and System Analysis**

**Tel-Aviv, Israel**

Business Consulting (September 1998 - July 1999)

- Planned, managed, and improved a logistic performance matrix. Defined and implemented the process of Materials Requirement Board for APPLIED MATERIALS ISRAEL LTD.
- Analyzed the need to establish a hardware division. Defined organizational and physical characteristics of the hardware division; including the interface with the development and production divisions for ELTA
- Coached organizations in preparing and implementing ISO 9002 method



## **Memberships**

INFORMS, Institute for Operations Research and the Management Sciences; CORS, Canadian Operations Research Society; Revenue management and pricing Section, Applied Probability Society, Manufacturing and Service Operations Management Society, Section on Location Analysis.

## **Services**

- Area Coordinator Operations Management and Statistics (July 2015 – Present).
- Director the Conservation Council of Ontario (CCO) (2014-2016)
- Member of the Master Programs Committee in the Rotman School of Management (2010-2015).
- Member of a Review Committee in the Rotman School of Management (2011).
- Member of the Recruiting Committee in Operations Management the Rotman School of Management (2005/2006, 2007/2008, 2012/2013, 2013/2014).
- Associate Editor: INFOR, Information System and Operational Research (2016-present), Manufacturing and Service Operations Management (M&SOM) (2010-Present), Mathematical Methods of Operations Research (MMOR) (2008-Present).
- Conference Chair:
  - Joint Israeli-Canadian Conferences on Queues, May 2019, the Hebrew University in Jerusalem, Israel (Co-Chair w. Moshe Haviv; forthcoming)
  - Rotman Round Table on Data Analytics in Healthcare, April 2018, the Rotman School of Management, ON (Co-Chair w. Rosmeary Hannam)
  - MSOM 2015, University of Toronto, the Rotman School of Management, ON (Co-Chair w. Milner Joseph)
  - Conference in Honour of Oded Berman, October 2012, Rotman school of Management (Co-Chair w. Dmitry Krass)
- Cluster Chair
  - CORS, Halifax, 2018, Cluster of Queueing Theory (Co-chair w. David Stanford)
  - CORS Banff, 2016, Cluster of Applied Probability and Stochastic Optimization
  - CORS Niagara Falls, 2012, Cluster of Stochastic Modeling (Co-Chair w. Doug Down)
- Session Chair:
  - Informs 2018 MSOM Service SIG
  - Informs 2017 MSOM cluster
  - POMS 2017 (w. Yonit Barron)
  - APS 2017 (w. Yonit Barron)
  - Informs 2015 MSOM SIG track on Services
  - Informs 2014 (Co-Chair w. Hossein Abouee-Mehrizi)
  - ECQT 2014 (First European Conference on Queueing Theory), Ghent, Belgium, Game Theory
  - CORS Ottawa, 2014, Stochastic Models in Queueing Systems
  - Informs 2013, MSOM SIG track New Results on Evaluating and Improving Service Systems
  - Informs 2013, Applied Probability track Applied Probability in Healthcare
  - INFORMS Phoenix, 2012, Informs 2012, MSOM Service Interest Group track Operations management in Healthcare (Co-Chair w. Philipp Afeche)
  - Informs 2012, MSOM general track Recent Inventory Models in Operations (Co-Chair w. Philipp Afeche)
  - Informs 2012, MSOM Service Interest Group track Multi-Servers models (Co-Chair w. Philipp Afeche)
  - Canadian Operations Research Society (CORS) 2012, Queueing and Stochastic Processes cluster: Recent developments in Queueing
  - INFORMS Charlotte, 2011, Queueing and Stochastic Inventory (Co-Chair w. Abouee-Mehrizi, H.)
  - CORS/INFROMS Toronto 2009, OM in Practice: Some Practical Operations Management Problems and Their Solutions (Co-Chair w. Hu, M.)

**Services (Session chair continues)**

- INFORMS Washington, 2008, On Timing in OM: Product Development, Supply Chain Coordination and Product Allocation (Co-Chair w. Balcioglu, B.)
- INFORMS Washington, 2008, Inventory and Capacity Topics (Co-Chair w. Milner, J.)
- INFORMS Pittsburgh, 2006, Revenue and Inventory management (Co-Chair w. Milner, J.)
- INFORMS Pittsburgh, 2006, Queuing Applications in Manufacturing and Services
- IFORS 2005, Risk Inventory Management and Pricing.
- INFORMS Atlanta, 2003, Revenue Management I.
- Referee: The INFORMS Journal on Computing, Mathematics of Operations Research (MOR), Transportation Science (TSc), Naval Research Logistics (NRL), European Journal of Operations Research (EJOR), Operations Research (OR), Production and Operations Management (POMS), Queueing Systems (QUESTA), Management Science (MS), Service SIG MSOM Conference, Manufacturing and Operations Management (M&SOM), MSOM Conference, IIE Transactions, 25th Mini EURO Conference on URPDM2010. Best student paper in MSOM award, MSOM Best paper award, CORS student paper competition, INFORMS Behavioral Operations Management Section Best Working Paper Award.
- Discussant: Service SIG MSOM Conference 2010.
- Grants Reviews:
  - a. National Science and Engineering Research Council (NSERC) (2009, 2011-4).
  - b. Fonds de Recherche sur la société et la culture (Quebec) (2012)
  - c. Jerusalem college of Engineering (2013)
  - d. The Israel Science Foundation (2015)
- Member of the Advising Committee for the Operations Management Student Organization in the Rotman School of Management (2010-present).

**Personal Interests:**

Bridge, traveling and hiking.