Tamar Cohen-Hillel

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Current Positions

Amazon.

Postdoctoral Research Scientist

July, 2020

Developing and supporting customer side scheduling system. Managing customers' work

Phone: (857) 800-2784

environment. Online support for customers around the world.

EDUCATION

Massachusetts Institute of Technology, Cambridge, Massachusetts USA

Operations Research Center

PhD, Operations Research, September 2015 - Sep 2020)

GPA 5.00/5.00

Advisor: Georgia Perakis

Technion – Israel Institute of Technology, Haifa, Israel

Industrial Engineering and Management

MSc, Information Management Engineering, March 2013 - July 2015

GPA 98/100 ,Summa Cum Laude

Thesis: Complexity Results for Periodic Decision Problems

Advisor: Liron Yedidsion

Technion - Israel Institute of Technology, Haifa, Israel

Industrial Engineering and Management

BSc, Industrial Engineering, March 2008 - March 2013

GPA 84/100

Final project: ASAT courses forecasting tool with final grade 98 out of 100

PUBLICATIONS

Published, accepted and under revision

Cohen-Hillel, T. and Yedidsion, L., 2018. The Periodic Joint Replenishment Problem Is Strongly NP-Hard. Mathematics of Operations Research, 43(4), pp.1269-1289.

• First place in Rothblum Award - ORSIS Prize for Excellence in Research in OR (2016).

Baardman, L., Borjian Boroujeni, S., Cohen-Hillel, T., Panchamgam, K. and Perakis, G., 2018. Detecting Customer Trends for Optimal Promotion Targeting. Accepted in Manufacturing & Service Operations Management.

- First place in POMS College of Supply Chain Management Best Student Paper Award
- Honorable mention in in MSOM Practice-Based Paper Competition (2019).
- Finalist in INFORMS Service Science Best Service Science Paper Award (2019).
- Finalist in POMS-JD.com Best Data-Driven Research Paper Competition (2019).
- Finalist in INFORMS Social Media Analytics Section Best Student Paper Award (2019).

Cohen-Hillel, T., Panchamgam, K. and Perakis, G., High-Low Promotion Policies for Peak End Demand Models, under Major revision in Management Science.

• First place in INFORMS Service Science Best Service Science Paper Award (2018).

SUBMITTED AND WORK IN PROGRESS

Cohen-Hillel, T., Panchamgam, K. and Perakis, G., Bounded Memory Peak End Models Can be Surprisingly Good, soon to be submitted.

• Finalist in POMS College of Behavior in Operations Management Junior Scholar Working Paper Competition (2019).

Baardman, L., Cohen-Hillel, T., and Perakis, G., Trade Funds from the Manufacturer's Perspective: Joint Demand Forecasting and Dynamic Pricing, work in progress.

Aparicio, D. Cohen-Hillel, T. and Perakis, G., **Promotion Policies for Peak-End Demand Models: A Field Experiment**, work in progress.

Cohen-Hillel, T. Perakis, G. Spantidakis, I. and Thayaparan, L. P. G., **Joint Fulfillment and Replenishment in Omni-channel**, work in progress.

Honors and Awards

- 2019: First place in POMS College of Supply Chain Management Best Student Paper Award
- 2019: Honorable mention in MSOM Practice-Based Paper Competition.
- 2019: Finalist in INFORMS Service Science Best Service Science Paper Award.
- 2019: Finalist in INFORMS Social Media Analytics Section Best Student Paper Award.
- 2019: Finalist in POMS-JD.com Best Data-Driven Research Paper Competition.
- 2019: Finalist in POMS College of Behavior in Operations Management Junior Scholar Working Paper Competition.
- 2019: Nomination for the Goodwin Medal for outstanding TA.
- 2018: First place in INFORMS Service Science Best Cluster Paper Competition.
- 2016: First place in Rothblum Award ORSIS Prize for Excellence in Research in OR.

INVITED TALKS

Baardman, L., Borjian Boroujeni, S., Cohen, T., Panchamgam, K., Perakis, G., (2019, January). Customer-trends for Personalized Demand Estimation and Targeted Promotions. Technion - Israel Institute of Technology, Israel.

Cohen, T., Panchamgam, K., and Perakis, G., (2018, October) **High-Low Promotion Policies for Peak End Demand Models**, Young Researchers Workshop Cornell ORIE 2018.

Cohen, T., Panchamgam, K., and Perakis, G., (2018, April) **Peak-End Demand Models and their Impact on Promotion Planning Problems**, MIT Sloan School of Management.

Cohen, T., and Yedidsion, L., (2016, January). **NP Hardness Proof for Joint Replenishment Problem**. Computer Science Department, Technion - Israel Institute of Technology, Israel.

Conference Presentations

Cohen-Hillel, T., Panchamgam, K., and Perakis, G., **High-Low Promotion Policies for Peak-End Demand Models.**

- 2019 Manufacturing & Services Operation Management Conference in Singapore.
- 2019 Revenue Management & Pricing Conference in Palo Alto, California.
- 2019 POMS Annual Conference in Washington, D.C.

Cohen-Hillel, T., Panchamgam, K., and Perakis, G., On the Power of Bounded Memory Peak End Demand Models.

- 2019 POMS Annual Conference in Washington, D.C.
- 2018 INFORMS Annual Conference in Houston, Texas.

Cohen-Hillel, T., Panchamgam, K., and Perakis, G., Peak-End Demand Models and their Impact on Promotion Optimization Problems.

- 2018 Manufacturing & Services Operation Management Conference in Dallas, Texas.
- 2018 Revenue Management & Pricing Conference in Toronto, Canada.
- 2017 INFORMS Annual Conference in Houston, Texas.

Baardman, L., Borjian Boroujeni, S., Cohen-Hillel, T., Panchamgam, K., Perakis, G., Customer-trends for Personalized Demand Estimation and Targeted Promotions.

- 2019 Manufacturing & Services Operation Management Conference in Singapore.
- 2019 POMS Annual Conference in Washington, D.C.
- 2018 Manufacturing & Services Operation Management Conference in Dallas, Texas.
- 2017 INFORMS Annual Conference in Houston, Texas.
- 2017 Manufacturing & Services Operation Management Conference in Chapel Hill, North Carolina.

Cohen-Hillel, T., and Yedidsion, L., NP-Hardness Proof for Joint Replenishment Problem. jul;

• 2016 INFORMS Annual Meeting 2016 in Nashville, Tennessee.

Cohen, T., and Yedidsion, L., Minimize the Flow Time of Multi Stages Jobs on Multi-Purpose Machines.

• 2015 19th Industrial Engineering and Management Conference in Tel Aviv, Israel.

Cohen, T., and Yedidsion, L., Assigning Employees to Vacations with Additional Constraints.

• 2014 18th Industrial Engineering and Management Conference in Tel Aviv, Israel.

TEACHING EXPERIENCE

Massachusetts Institute of Technology

Teaching assistant

January, 2017 - June, 2019

Data, models and decisions (15.730)- Executive MBA course.

Technion, Israel Institute of Technology

Teaching assistant

July, 2012 - Joly, 2015

Fault Tolerant Networks Protocols (97211)-Graduate level course. TA in charge.

Advanced topic in Information systems (96260) - Graduate level course. TA in charge.

Introduction to Computer Technologies (94210)- Undergraduate level course. TA in charge.

Data Structures and Algorithms (994223)- Undergraduate level course. TA in charge.

Introduction to Scheduling (96326) - Graduate level course. TA in charge.

Operation of Production Service Systems (94142) - Undergraduate level course.

ASAT- Technion Student Association

Teacher in ASAT pre-test preparation classes September, 2008 - February, 2010 Teaching a class of 40 students and preparing them for final exams in basic and advanced programming courses.

Pre-college Preparation Class

September, 2010 - October, 2010

Teaching a class of 40 students and preparing them for programming courses in the first year at the Technion.

Professional Service

- Reviewer for Operations Research and Management Science
- Student coordinator for the MIT Sloan OM Seminar series (2018-2019)
- Student coordinator for the MIT ORC Seminar series (2018)
- Officer at the INFORMS student chapter at MIT (2016-2017)

Professional Experience

TEVA

Programmer for consultation project for TEVA July, 2013 - November, 2013 Developing and implementing an assignment algorithm with constraints.

Intel Corp.

System admin, customer side developer February, 2010 - January, 2013 Developing and supporting customer side scheduling system. Managing customers' work environment. Online support for customers around the world.

SKILLS

- Programming: MATLAB, Python, Perl, C, C++, R, Julia, SQL
- Languages: English, Hebrew

CITIZENSHIP

United States, Israel