RESUME

Galit Bracha Yom-Tov

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ACADEMIC DEGREES

- Ph.D. 2010, Operations Research, William Davidson Faculty of Industrial Engineering and Management, Technion Israel Institute of Technology, Haifa, IL.
- M.Sc. 2006, Industrial Engineering, William Davidson Faculty of Industrial Engineering and Management, Technion Israel Institute of Technology, Haifa, IL. *Cum Laude*.
- B.Sc. 1997, Industrial Engineering and Management, William Davidson Faculty of Industrial Engineering and Management, Technion Israel Institute of Technology, Haifa, IL. Summa Cum Laude.

ACADEMIC APPOINTMENTS

- 2021—present Associate Professor, Faculty of Data and Decision Sciences (previously William Davidson Faculty of Industrial Engineering and Management), Technion, Israel.
 - 2017–2021 Senior Lecturer (Senior Assistant Professor), William Davidson Faculty of Industrial Engineering and Management, Technion, Israel.
 - 2014–2017 Lecturer (Assistant Professor), William Davidson Faculty of Industrial Engineering and Management, Technion, Israel.
 - 2012–2014 Research Fellow, William Davidson Faculty of Industrial Engineering and Management, Technion, Israel.
 - 2012 Adjunct Professor, Department of Industrial Engineering and Operations Research (IEOR), The Fu Foundation School of Engineering and Applied Science, Columbia University, New York, NY, USA.
 - 2010–2012 Post-doc, Department of Industrial Engineering and Operations Research (IEOR), The Fu Foundation School of Engineering and Applied Science, Columbia University, New York, NY, USA.

PROFESSIONAL EXPERIENCE (Outside Academia)

- 1999–2004 Information Technology Project Manager. PCB Technologies, Migdal HaEmek, Israel. Worked in the IT group and led the implementation and adaptation of ERP software in the engineering, manufacturing and logistics departments. Responsible for other production engineering projects as well.
- 1997–1999 Production Engineer. Tambour, Acco, Israel. Involved in various projects, including improvement of production systems, assessing the financial viability of investments, and initiation and implementation of IT systems.
 - 1996 Summer Internship. Daimler-Benz, R&D Center, Ulm, Germany.
- 1994–1997 Equipment LTD, Haifa, Israel. Part-time job during undergraduate studies. Projects in market analysis, pricing, and definition of IT systems.

RESEARCH INTERESTS

My research interest is behavioral operations of service systems, such as healthcare and contact centers. In particular, developing and testing models for understanding the impact of customer and agent behavior on service systems and incorporating such behaviors into operational models and optimization of service systems. I use a multidisciplinary research approach that combines data science and stochastic modeling. For example, using archives of digital traces from service systems to study the dynamics of customer emotions in contact centers, and incorporating such information to predict customer service time and design new routing procedures.

TEACHING EXPERIENCE

Lecturer: Technion—Israel Institute of Technology, Haifa, Israel

- 096324 Service Engineering (undergraduate core and graduate elective). 2012–2022.
- 094139 Supply Chain Management (undergraduate core). 2017-present.
- 097135 Multidisciplinary Research in Service Engineering (graduate elective). 2017–present. (This new course was developed by Galit Yom-Tov and integrates behavioral operations, data science, and queueing theory for analyzing service systems operations.)
- 097120 Selected Topics in Industrial Engineering (graduate elective). Spring 2016.
- 097121 Advanced Topics in Industrial Engineering (graduate elective). Spring 2013. (This course is given as part of a design process of a new graduate course in Healthcare operations for the Technion and NYU. Additional participants in the development of this course are Prof. Avishai Mandelbaum (Technion) and Prof. Mor Armony (NYU).)

Lecturer: Columbia University, New York, NY, USA

- IEOR4165 Service Engineering (undergraduate and graduate elective). Spring 2012.
- IEOR8100 Topics in OR: Stochastic Models in Service Engineering (advanced doctoral course). Spring 2012.

TA: Technion—Israel Institute of Technology, Haifa, Israel. 2004–2010. Courses: Service Engineering (undergraduate, graduate), Probability (undergraduate), Stochastic Processes (graduate), Stochastic Modeling (undergraduate), Logistics (undergraduate), ERP Laboratories (undergraduate).

TECHNION ACTIVITIES

- 2023-present Steering committee for Wolfe Center for Engineering and Medicine.
 - 2021–2022 New faculty development committee.
- 2019—present Member of the multi-faculty committee for Design and Manufacturing Management graduate program.

DEPARTMENTAL ACTIVITIES

- 2019-present Director of the Technion SEELab research center.
 - 2014–2018 Organizing the Quantitative seminar (Joint seminar for IE, OR, IT, Statistics).
 - 2014 Head of the organizing committee of the Erasmus-Technion Workshop on Healthcare Operations.

EDITORIAL DUTIES

- 2022-present Associate Editor (AE), Operations Research (OR).
- 2021-present Associate Editor (AE), Manufacturing & Service Operations Management (M&SOM).
 - 2023 Guest Editor, Operations Research. Special issue on Behavioral Queues, published June 2023.

PUBLIC PROFESSIONAL ACTIVITIES

- 2020–2021 Israel National Park Authority, Developing policies for regulating park entrance during COVID-19 pandemic.
- 2020–2022 Applied Probability Society (APS) council member (the international-liaison post), INFORMS.
 - 2020 Committee member of the Applied Probability Society (APS) best paper competition.
 - 2018 Reviewer for the Applied Probability Society (APS) best paper competition.
- 2018, 20, 21 Reviewer for the Behavioral Operations Management best paper competition.
- 2013, 2018 Grant Reviewer and Judge: Israel Ministry of Science, Technology and Space.
- 2016-2018 Official member of the European action COST CA15222: "European Network for cost containment and improved quality of health care".
- 2014, 2017 Doctoral committees: K.U. Leuven, Belgium; Mieke Defraeye (2014), Raisa Carmen (2017). Eindhoven University of Technology, Netherlands; Britt W.J. Mathijsen (2017).
 - 2015 Ministry of Health committee for determining quality measures for emergency departments in Israel.

Reviewer Management Science, Operations Research, M&SOM (Manufacturing & Service Operations Management), Stochastic Systems, Naval Research Logistics, EJOR (European Journal of Operations Research), Omega, Journal of the Operational Research Society, EJTL (EURO Journal on Transportation and Logistics).

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Institute for Operations Research and Management Science (INFORMS)
- Manufacturing & Service Operations Management (M&SOM)
- Applied Probability Society (APS)
- Operations Research Society of Israel (ORSIS)

AWARDS and HONORS

- 2022 1st place in the Journal of Organizational Behaviors (JOB) Best Paper of 2021 competition, for the paper: When do service employees smile? Responsedependent emotion regulation in emotional labor (with S. Ashtar, A. Rafaeli, and N. Akiva).
- 2022 Finalist in the POMS Best Working Paper Award for the paper: The Co-Production of Service: Modeling Service Times in Contact Centers Using Hawkes Processes (with A. Castellanos, A. Daw, J. Pender, and L. Gruendlinger).
- 2020 Finalist in the INFORMS-BOPS Best Working Paper Award for the paper: Silent Abandon-ment: Patience Estimation and Operational Impact (with A. Castellanos and Y. Goldberg).
- 2020 1st place in the ORSIS Best Student Paper Competition for the paper: Silent Abandonment: Patience Estimation and Operational Impact (with A. Castellanos and Y. Goldberg).
- 2019 2nd place in the Israel Statistical Association Best Student Poster Competition for the poster: Silent Abandonment: Patience Estimation and Operational Impact (with A. Castellanos and Y. Goldberg).
- 2018 1st place in the ORSIS Best Student Paper Competition for the paper: State-Dependent Estimation of Delay Distributions in Fork-Join Networks (with N. Carmeli and O. Boxma).
- 2017 Finalist in the INFORMS-IBM Service Science Best Student Paper Award Competition for the paper: When Psychology Meets Operations: The Influence of Cognitive and Emotional Loads on the Efficiency of Customer-Service Employees (with D. Altman and A. Rafaeli).
- 2017 Finalist in the Frontiers Best Paper Award for the paper: Text-Based Customer Service: Using Big-Data to Connect Customer Emotion to Service Operations (with <u>D. Altman</u> and A. Rafaeli).
- 2012 2nd place in the INFORMS-JFIG Best Paper Award for the paper: When to use Speedup: An Examination of Intensive Care Units with Readmissions (with C.W. Chan).
- 2014 1st place in the 16th Israeli IE&M Conference Best Student Paper Award for the paper: Erlang-R: A Time-Varying Queue with Reentrant Customers, in Support of Healthcare Staffing.
- 2008 Prof. Samuel and Lillian Keidan Levin Prize, Technion.
- 2004 Technion Excellence Scholarship for M.Sc. students.

GRADUATE STUDENTS

Completed Ph.D. Theses

- 1. Raisa Carmen, 2017, "Resource Efficiency Improvements in Hospitals," K.U. Leuven, Belgium (Primary advisor Prof. Inneke Van Nieuwenhuyse). Current position: Researcher at INBO (Institute for Nature and Forest Research, Belgium).
- 2. Nitzan Carmeli, 2020, "Data-Based Resource-View of Service Networks: Performance Analysis, Delay Prediction and Asymptotics," (Co-advisor Prof. Avi Mandelbaum).
- 3. Shelly Ashtar, 2021, "Affective Displays in Service Interactions," (Primary advisor Prof. Anat Rafaeli).
- 4. Daniel Altman, 2021, "Emotional Load in Service Systems: Definition and Examination of the Effects of Emotional Load on Employee Performance" (Assisting advisor Prof. Anat Rafaeli).
- 5. Monika Westphal, 2021, "Information Transparency: Promoting Understanding of Organizational Processes" (Assisting advisor Prof. Anat Rafaeli). Current position: Postdoc at University of Cologne, Department of Supply Chain Management & Management Science.
- 6. Antonio Castellanos, 2022, "Uncertainty in Service Systems: Performance Measure Estimation and Optimization Methods for Contact Centers with Information Uncertainty". (Direct Ph.D.) Current position: Postdoc at Chicago University, Booth School of Business. Honourable mention from George B. Dantzig Dissertation Award at 2023 INFORMS Annual Meeting.

Completed M.Sc. Theses

- 1. Tali Gertz, 2017, "How to Utilize Call Backs: Time-Varying Queues with a Call Back Option,"
- 2. Daniel Altman, 2017, "Modeling Human Behavioral Reactions to Emotions Expressed by Others: A Non-obtrusive Examination of Customer Service Employees Behavior," (Assisting advisor Prof. Anat Rafaeli).
- 3. Shelly Ashtar, 2017, "The Impact of Operational Load on Agent Withdrawal Behavior in Service Systems," (Assisting advisor Prof. Anat Rafaeli).
- 4. Yueming Xie, 2017, "An Invitation Control Policy for Proactive Service Systems: Balancing Efficiency, Value and Service Level," (Assisting advisor Prof. Liron Yedidsion).
- 5. Monika Westphal, 2017 "Customer Emotional Reactions to Employee Multitasking: The Role of Customer Waiting in Chat-based Service Interactions," (Assisting advisor Prof. Anat Rafaeli).
- 6. Antonio Castellanos, 2020 "Uncertainty in Service Systems: Performance Measure Estimation and Optimization Methods for Contact Centers with Information Uncertainty".
- 7. Lior-Tony Landa, 2021 "The Reactive Hidden Markov Model: Real-Time Estimation of Customer Satisfaction in Contact Centers".
- 8. Matias Kohn, 2022 "The Impact of Procedural and Distributive Justice on Patient Flow in Hospitals". Current position: PhD student at TUM.

M.Sc. Theses in Progress

1. Yamit Lion, started 3/2020, M.Sc. expected 9/2023.

2. Keren Weisman, started 9/2021, M.Sc. expected 9/2023.

SPONSORED LONG-TERM VISITORS AND POST-DOCTORAL ASSOCIATES

- 2018 Wen-Hao Fan, National Tsing Hua University, Taiwan.
- 2019 Andrew Daw, Cornell University. Current position: Marshall School of Business at the University of Southern California.

RESEARCH GRANTS

Competitive

- 2023–2027 United States-Israel Binational Science Foundation (BSF), Modeling, Identifying, and Managing Contact Centers Performance in the Presence of Customer and Agent Behavior, Grant No. 2022095, 155,600 USD. (Co-investigators: Andrew Daw and Yair Goldberg).
- 2021–2023 Deutsche Forschungsgemeinschaft (DFG), Integrating Emotional Load into Service Operations, 412,300 Euro. (Co-PIs: Mirko Kremer and Anat Rafaeli).
- 2019–2021 Israel Science Foundation (ISF), Service Systems in the Digital World: Sentiment Analysis as a Tool to Improve Queueing System Efficiency, Grant No. 336/19, 518,000 NIS.
- 2016–2019 Israel Ministry of Science, Technology and Space (MOST), Real-time Process Transparency and Delay Information in Healthcare Services: Theory, Impact and Applications, Grant No. 2015-6-86 1,081,794 NIS (Co-PIs: Anat Rafaeli and Avi Parush).
- 2015–2019 Israel Science Foundation (ISF), Announcing Delays in Queueing Networks, for example Hospitals: Theory, Impact, and Applications, Grant No. 1955/15, 570,000 NIS (Co-PI: Avi Mandelbaum).

Industrial and Other Sources

- 2021 B.M. Gordon Foundation for System Engineering, Sentiment Based Routing: Integrating Emotional Load into Procedures for Routing Customers to Service Agents, 20,000 USD. (Co-PI: Anat Rafaeli).
- 2020 B.M. Gordon Foundation for System Engineering, Quality and Efficiency Measures in Contact Centers, 20,125 USD. (Co-PI: Yair Goldberg).
- 2016–2018 Israel Innovation Authority, MAGNETON Program, Staffing in Contact Centers with Reentrant Customer Services, Grant No. 57948, 3,293,600 NIS (Industrial partner: LivePerson Ltd.).
- 2016–2018 The Israel National Institute for Health Policy and Health Services Research (NIHP), The Impact of Personalized and Dynamic Information Availability on Patient Feelings (Understanding, Satisfaction, Empowerment, Stress) and Operational Factors (Personnel Interruption, Wait Time, Abandonment) in Emergency Departments (EDs), Grant No. 2015/120/r, 153,968 NIS (Co-PIs: Anat Rafaeli, Avi Parush, and Chen Shapira).
 - 2015 Clalit Health Services. Research grant. 100,000 NIS (Co-PIs: Anat Rafaeli and Avi Parush).
 - 2015 The Harold and Inge Marcus Endowment for Technion/PSU IE Partnership. (Co-PI: Guodong Pang).

- 2013 The Harold and Inge Marcus Endowment for Technion/PSU IE Partnership. (Co-PI: Guodong Pang).
- 2008–2010 The Israel National Institute for Health Policy and Health Services Research (NIHP), Ph.D. scholarship.

PUBLICATIONS

Theses

- 1. Ph.D. Dissertation, Queues in Hospitals: Queueing Networks with ReEntering Customers in the QED Regime, 2010. (Advisor: Prof. Avishai Mandelbaum)
- 2. M.Sc. Dissertation, *Portfolio Management Approach to Supplier Selection*, 2006. (Advisor: Prof. Boaz Golany)

Refereed Papers in Professional Journals

Authors ordered by contribution expect those papers denoted (*) which are alphabetical. An c denotes the corresponding author of the manuscript. Students are underlined.

Published Papers

- G.B. Yom-Tov^c and A. Mandelbaum "Erlang-R: A Time-Varying Queue with Reentrant Customers, in Support of Healthcare Staffing," Manufacturing and Service Operations Management (M&SOM), 16(2):283–299, 2014.
- 2. (*) C.W. Chan^c, **G.B. Yom-Tov**, and G. Escobar "When to use Speedup: An Examination of Service Systems with Returns," Operations Research, 62(2):462–482, 2014.
- 3. (*) J. Dong, P. Feldman, and **G.B. Yom-Tov**^c "Service Systems with Slowdowns: Potential Failures and Proposed Solutions," Operations Research, 63(2):305–324, 2015.
- (*) M. Armony^c, S. Israelit, A. Mandelbaum, Y.N. Marmor, Y. Tseytlin, and G.B. Yom-Tov "On Patient Flow in Hospitals: A Data-Based Queueing-Science Perspective," Stochastic Systems, 5(1):146

 194, 2015.
- 5. (*) J. Dong, E. Yom-Tov and **G.B. Yom-Tov** "The Impact of Delay Announcements on Hospital Network Coordination and Waiting Times," Management Science, 65(5):1969–1994, 2018.
- R. Carmen, G.B. Yom-Tov, I. Van Nieuwenhuyse, B. Foubert, and Y. Ofran^c "The Role of Specialized Hospital Units in Infection and Mortality Risk Reduction Among Patients with Hematological Cancers," PLoS ONE 14(3): e0211694, 2019.
- 7. M. Westphal, **G.B. Yom-Tov**^c, A. Parush, <u>N. Carmeli, A. Shaulov</u>, C. Shapira, A. Rafaeli "A Patient-Centered Information System (myED) for Emergency Care Journeys: Design, Development, and Initial Adoption". JMIR Form Res, 4(2):e16410, 2020.
- 8. **G.B. Yom-Tov**^c, L. Yedidsion, and <u>Y. Xie</u> "An Invitation Control Policy for Proactive Service Systems: Balancing Efficiency, Value and Service Level". Manufacturing and Service Operations Management (M&SOM), 23(5):1077–1095, 2021.
- 9. <u>D. Altman,</u> **G.B. Yom-Tov**^c, M.O. Olivares, <u>S. Ashtar</u>, and A. Rafaeli "Do Customer Emotions Affect Agent Speed? An Empirical Study of Emotional Load in Online Customer Contact Centers". Manufacturing and Service Operations Management (M&SOM), 23(4):854–875, 2021.
- G.B. Yom-Tov^c and C.W. Chan "Managing Intensive Care Units: Speedup versus Admission Control". Queueing Systems 97:163–219, 2021.
- 11. <u>S. Ashtar</u>^c, **G.B. Yom-Tov**, A. Rafaeli, and N. Akiva "When Do Service Employees Smile? Response-Dependent Emotion Regulation in Emotional Labor". Journal of Organizational Behavior (JOB), 42:1202–1227, 2021.

- G.B. Yom-Tov^c and A. Rafaeli "Integrating Emotional Load into Service Operations". Queueing Systems (QUESTA), Special issue: 100 views on queues, 100(3), 2022. (DOI: 10.1007/s11134-022-09740-3)
- 13. N. Carmeli, G.B. Yom-Tov^c, and O. Boxma "State-Dependent Estimation of Delay Distributions in Fork-Join Networks". Manufacturing and Service Operations Management (M&SOM), 25(3): 1081-1098, 2023.
- 14. M. Westphal^c, M. Vössing, G. Satzger, **G.B. Yom-Tov**, and A. Rafaeli "Decision Control and Explanations in Human-AI Collaboration: Improving User Perceptions and Compliance". Computers in Human Behavior, 144:107714, 2023.
- 15. <u>S. Ashtar</u>, **G.B. Yom-Tov**^c, A. Rafaeli, and J. Wirtz "Affect-as-Information: Customer and Employee Affective Displays as Expeditious Predictors of Customer Satisfaction". Journal of Service Research (JSR) 0(0), 2023.

Accepted (or in Press) Papers

 A. Daw^c, A. Castellanos, G.B. Yom-Tov, J. Pender, and L. Gruendlinger "The Co-Production of Service: Modeling Service Times in Contact Centers Using Hawkes Processes". Management Science, 2023

Submitted Papers

- 1. <u>A. Castellanos</u>^c, **G.B. Yom-Tov**, and Y. Goldberg "Silent Abandonment in Contact Centers: Estimating Customer Patience with Uncertain Data". (under revision)
- 2. <u>D. Altman</u>^c, A. Rafaeli, and **G.B. Yom-Tov** "Emotional Workload in Healthcare: Identifying and Scaling the Emotional Demand in Healthcare Work Events". (under revision).
- 3. (*) M. Armony and **G.B. Yom-Tov**^c "Hospitalization vs. Home-Care: Balancing Mortality and Infection Risks for Hematology Patients". Manufacturing and Service Operations Management (M&SOM) (under revision, major).
- L.T. Landa, A. Castellanos, Y. Goldberg, and G.B. Yom-Tov^c "The Reactive Hidden Markov Model: Real-Time Estimation of Customer Satisfaction in Contact Centers". Journal of Service Research (JSR) (under revision, major).
- 5. <u>M. Chen</u>^c, O. Baron, A. Mandelbaum, J. Wang, **G.B. Yom-Tov**, and N. Arber "Waiting Experience in Open-Shop Service Networks: Improvements via Flow Analytics & Automation". M&SOM (under review, 2nd round).
- 6. M. Westphal^c, G.B. Yom-Tov, A. Parush, and A. Rafaeli "Reducing Abandonment and Improving Attitudes in Emergency Departments: Integrating Delay Announcements into Operational Transparency to Signal Service Quality". (under revision)
- 7. P. Momčilović^c, A. Mandelbaum, <u>N. Carmeli</u>, M. Armony, and **G.B. Yom-Tov** "Resource-Driven Activity-Networks (RANs): A Modelling Framework for Complex Operations". Operations Research (under review, 1st round).

Chapters in Books

- 1. M. Horwitch^c, H. Grupp, S. Maital, G. Dopelt, and **G. Sobel**¹ "Global Integration of Marketing and R&D: IBM'S Haifa Research Laboratory and its 'Webcutter' Technology." A.G. Woodside (Ed.) Getting Better at Sensemaking. JAI Press, Stamford, Connecticut, USA. pp. 203-214, 2000.
- A. Rafaeli^c, G.B. Yom-Tov, S. Ashtar, and D. Altman "Opportunities, Tools and New Insights: Evidence on Emotions in Service from Analyses of Digital Traces Data." C.E.J. Härtel, W.J. Zerbe, and N.M. Ashkanasy (Ed.) Emotions and Service in the Digital Age (Research on Emotions in Organizations, Vol 16), Emerald Publishing Limited, UK pp. 105–136, 2020.

¹Former surname of G. Yom-Tov was Sobel

Refereed Papers in Conference Proceedings

- G.B. Yom-Tov^c, S. Ashtar, D. Altman, M. Natapov, N. Barkay, M. Westphal, and A. Rafaeli. 2018.
 "Customer Sentiment in Web-Based Service Interactions: Automated Analyses and New Insights".
 In WWW 18 Companion: The 2018 Web Conference Companion, April 23–27, 2018, Lyon, France.
 ACM, New York, NY, USA, 9 pages.
- 2. **G.B. Yom-Tov**^c and <u>T. Gurtz</u>. 2018. "Delay Guarantee Planning of Call-back Options in Time-varying Service Systems". Proceedings of the 2018 Winter Simulation Conference (WSC '18), December 9–12, 2018, Gothenburg, Sweden, 11 pages.
- 3. A. Rafaeli^c, <u>D. Altman</u>, and **G.B. Yom-Tov**. 2018. "Cognitive and Emotional Load Influence Response Time of Customer-Service Agents: A Large Scale Analysis of Chat Service Conversations". Proceedings of the 52nd Hawaii International Conference on System Sciences (HICSS-52), January 8–11, 2019, Hawaii, US, 10 pages.

Accepted (or in Press) Papers

4. (*) A. Daw^c and **G.B. Yom-Tov**. 2023. "Markov Process Simulations of Service Systems with Concurrent Hawkes Service Interactions". Proceedings of the 2023 Winter Simulation Conference (WSC '23), December 10–13, 2023, San Antonio, TX, US, 12 pages.

Other Papers

1. (*) A. Ingolfsson, A. Mandelbaum, K. Schultz, and **G.B. Yom-Tov** "Preface to the Special Issue on Behavioral Queueing Science: The Need for a Multidisciplinary Approach," Operations Research, pp. 1–8, 2023.

CONFERENCES

Plenary, Keynote or Invited talks

Keynote Talks

- 1. "myED: Predicting and Announcing Wait Time in EDs and their Impact on Patient Abandonment (LWBS)," IMSI workshop on "Predictive Analytics, Business Modeling and Optimization in Healthcare Operations Management" 2023 (Chicago, IL, USA).
- 2. "Emotional Load: The Human Side of Queueing Systems," CanQueue 2021 (Montreal, Canada).
- 3. "Silent Abandonment in Contact Centers: Estimating Customer Patience from Uncertain Data," 9th Israeli Industrial Engineering and Management Research Conference, 2020 (Haifa, IL).
- 4. "Do Customer Emotions Affect Worker Productivity? An Empirical Study of Emotional Load in Online Customer Contact Centers," *Healthcare and Service Operations Workshop*, 2019 (Shenzen, China).
- 5. "Balancing Multi-Featured Workload in Service Systems," Israel-Canada workshop on queues, 2019 (Jerusalem, IL).
- "The Impact of Delay Announcements on Hospital Network Coordination and Waiting Times," Stochastic Networks Conference, 2016 (San Diego, CA, USA).
- 7. "Time Varying Queues in Healthcare Systems," 2010 INFORMS Annual Meeting (Austin, TX, USA).

 Discussant for the Markov Lecture in honor of Prof. Ward Whitt.

Plenary Talks

- 1. "Reducing Abandonment and Improving Attitudes in Emergency Departments: Integrating Delay Announcements into Operational Transparency to Signal Service Quality," 2022 Behavioral Operations Conference (Arkansas, USA).
- 2. "The Influence of Customer Emotions in Chat-service Operations," 2017 Behavioral Operations Conference (Boston, USA).

Semi-Plenary Talks

- 1. "The Co-Production of Service: Modeling Service Times in Contact Centers Using Hawkes Processes," 2021 M&SOM International Conference Service SIG (Online). The invited semi-plenary talk was given by Andrew Daw.
- 2. "myED: Process and Delay Announcements for Emergency Departments," 2020 The Web Conference—Web of Health day (Taipei, Taiwan, online).
- 3. "Slowdown Services: Staffing Service Systems with Load-Dependent Service Rate," 2014 M&SOM International Conference Service SIG (Seattle, WA, USA).

Invited Talks (in Conferences Invited Sessions)

- 1. "The Impact of Procedural Justice on Patient Flow in Hospitals," 2023 INFORMS Annual Meeting (Pheonix, USA).
- 2. "Asymmetries of Service: Interdependence and Synchronicity," 2023 APS (Nancy, France). Talk given by A. Daw.
- 3. "Closing the Service: Service Success Heterogeneity and Its Impact on Routing," 2023 APS (Nancy, France). Talk given by A. Daw.
- 4. "Optimizing Hematology Patients LOS using Mortality and Infection Risk Predictions," 2023 APS Annual Meeting (Nancy, FR).
- 5. "The Impact of Procedural Justice on Patient Flow in Hospitals," 2023 Workshop in Management Science (Puerto Varas, Chile).
- 6. "The Impact of Procedural Justice on Patient Flow in Hospitals," EURO 2022 (Espoo, Finland).
- 7. "The Impact of Procedural Justice on Patient Flow in Hospitals," 2021 INFORMS Annual Meeting (Anaheim, CA, USA and online).
- 8. "Hospitalization vs. Home-Care: Treating Haematology Patients under Scarce Capacity," 2021 IN-FORMS Annual Meeting (Online).
- 9. "Hospitalization vs. Home-Care: Treating Haematology Patients under Scarce Capacity," 2020 IN-FORMS Annual Meeting (Online).
- 10. "Balancing of Load (Operational, Emotional, Cognitive) in Service System (Hospitals, Contact Centers)" 2019 ORSIS Conference (Shfaim, Israel).
- 11. "Balancing in Multi-Featured Workload in Service Systems" 2019 INFORMS APS Conference (Brisbane, Australia).
- 12. "Optimizing Discharge Decisions in a Hematology Ward," 2018 INFORMS Annual Meeting (Phoenix, AZ, USA).
- 13. "Load Balancing in Multi-featured Multi-class Multi-skill Service Systems" 2018 INFORMS Annual Meeting (Phoenix, USA).
- 14. "An Empirical Study of Customer Patience and Abandonment in Online Wait for Customer Service: The Role of Delay Announcements and Customer Meandering" 2017 INFORMS Annual Meeting (Houston, TX, USA).
- 15. "When Psychology Meets Operations: The Influence of Cognitive and Emotional Loads on the Efficiency of Customer-Service Employees," 2017 INFORMS Annual Meeting (Houston, TX, USA).
- 16. "The Influence of Customer Emotions in Chat Service Operations," 2017 INFORMS Annual Meeting (Houston, TX, USA).
- 17. "The Impact of Delay Announcements on Hospital Network Coordination and Waiting Times," 2017 INFORMS Annual Meeting (Houston, TX, USA).
- 18. "On the Connection Between Customer Emotions and Operations in Services Systems," 2016 Technion-HKUST Workshop (Hong-Kong).
- 19. "The Impact of Delay Announcements on Hospital Network Coordination and Waiting Times," 2015 INFORMS Annual Meeting (Philadelphia, PA, USA).

- 20. "Building Personal Connections: An Empirical Analysis of Financial Call Centers," 2014 INFORMS Annual Meeting (San Francisco, CA, USA).
- 21. "Managing Intensive Care Units: Speedup versus Admission Control," 2014 INFORMS Annual Meeting (San Francisco, CA, USA).
- 22. "Slowdown Services: Staffing Service Systems with Load-Dependent Service Rate," 2014 INFORMS Annual Meeting (San Francisco, CA, USA).
- 23. "Managing Intensive Care Units: Speedup versus Admission Control," 2013 INFORMS Annual Meeting (Minneapolis, MN, USA).
- 24. "Slowdown Services: Staffing Service Systems with Load-Dependent Service Rate," 2013 INFORMS Annual Meeting (Minneapolis, MN, USA). 'Intensive Care Unit Patient Flow with Readmissions: A State-Dependent Queueing Network," 2012 INFORMS Annual Meeting (Phoenix, AZ, USA).
- 25. "Queues in Hospitals: Empirical Study," 2011 INFORMS Annual Meeting (Charlotte, NC, USA).
- 26. "Intensive Care Unit Patient Flow with Readmissions: A State-Dependent Queueing Network," 2011 INFORMS Annual Meeting (Charlotte, NC, USA).
- 27. "Empirical Adventures in Hospitals," 2010 INFORMS Annual Meeting (Austin, TX, USA).
- 28. "The Erlang-R Queue: A Model Supporting Personnel Staffing in Emergency Wards". 2009 WITOR-09 The First Turkish and Israeli OR Societies Workshop (Istanbul, Turkey).

Contributed Talks (in Conference Contributed Sessions) - All Oral Presentations

An underling denotes the speaker.

- 1. M. Chen, <u>O. Baron</u>, A. Mandelbaum, J. Wang, G.B. Yom-Tov, N. Arber "Waiting Experience in Open-shop Service Networks: Improvements via Flow Analytics & Automation". 2023 M&SOM (Montreal, Canada)
- 2. <u>A. Daw, G.B. Yom-Tov</u> "Asymmetries of Service: Interdependence and Synchronicity," 2023 APS (Nancy, France), 2023 M&SOM (Montreal, Canada), 2023 Behavioral Operations (Baltimore, Maryland, USA).
- 3. M. Kohn, G.B. Yom-Tov, and A. Rafaeli "The Impact Of Procedural Justice On Patient Flow In Hospitals," 2023 POMS International (Paris, FR).
- 4. M. Westphal, M. Cho, R. Buell, A. Rafaeli, G.B. Yom-Tov "Transparency into Contracts and Consumer Willingness to Sign the Contract". 2021 INFORMS Annual Meeting (Online)
- 5. M. Westphal, G.B. Yom-Tov, A. Parush, A. Rafaeli "Reducing Abandonment and Improving Attitudes in Emergency Departments: Integrating Delay Announcements into Operational Transparency to Signal Service Quality," 2022 M&SOM (Munich, Germany).
- 6. <u>A. Castellanos</u>, G.B. Yom-Tov, and Y. Goldberg "Silent Abandonment: Patience Estimation and Operational Impact," 2021 CanQueue (Montreal, Canada), 2021 INFORMS Annual Meeting (Anaheim, CA, USA and online).
- 7. <u>A. Daw</u>, A. Castellanos, G.B. Yom-Tov, J. Pender, and L. Gruendlinger ."The Co-Production of Service: Modeling Service Times in Contact Centers Using Hawkes Processes," 2021 INFORMS Annual Meeting (Anaheim, CA, USA and online), 2020 INFORMS Annual Meeting (Online).
- 8. <u>L.T. Lamda</u>, A. Castellanos, Y. Goldberg, and G.B. Yom-Tov, "The Reactive Hidden Markov Model: Real-Time Estimation of Customer Satisfaction in Contact Centers" 22nd IE&M conference, 2021 (Reashon Lezion, Israel).
- 9. M. Westphal, G.B. Yom-Tov, A. Parush, N. Carmeli, A. Shaulov, C. Shapira, and A. Rafaeli "A Patient-Centered Information System (myED) for Emergency Care Journeys: Design, Development, and Initial Adoption". 2020 INFORMS Annual Meeting (Online)
- 10. A. Daw, <u>A. Castellanos</u>, G.B. Yom-Tov, J. Pender, and L. Gruendlinger "The Co-Production of Service: Modeling Service Times in Contact Centers Using Hawkes Processes". *EURO 2021 (Athens, Greece)*, 22nd IE&M conference, 2021 (Reashon Lezion, Israel).

- 11. A. Castellanos, <u>G.B. Yom-Tov</u>, and Y. Goldberg "Silent Abandonment: Patience Estimation and Operational Impact". 2019 M&SOM International Conference (Singapore, Singapore), 2021 M&SOM (Online).
- 12. "Balancing of Load (Operational, Emotional, Cognitive) in Healthcare Systems" 2019 INFORMS Healthcare Conference (Boston, MA, USA).
- 13. A. Rafaeli, M. Westphal, A. Parush, G.B. Yom-Tov, and <u>A. Shaulov</u> "Technology as a Sensegiving Agent: Using a Platform to Educate Emergency Care Patients". In: APA Technology, Mind and Society, 2019, Washington DC, USA.
- 14. D. Altman, A. Ashtar, <u>G.B. Yom-Tov</u>, and M. Olivares "Do Customer Emotions Affect Worker Productivity? An Empirical Study of Emotional Load in Online Customer Contact Centers," *2019 M&SOM International Conference (Singapore, Singapore)*.
- 15. N. Carmeli, G.B. Yom-Tov, and O. Boxma, "State-Dependent Estimation of Delay Distributions in Fork-Join Networks". 2018 M&SOM International Conference (Dallas, TX, USA), 2018 ORSIS Conference (Beer-Sheva, Israel)
- 16. R. Carmen, G.B. Yom-Tov, I. Van Nieuwenhuyse, B. Foubert, and Y. Ofran, "The Impact of Dedicated Emergency and Admission Units on Infection and Death Risks in Hemato-oncological Patients Presented to a Tertiary Care Center". 2017 ASH (American Society of Hematology) Conference (Atlanta, GA, USA). [Note that only 10% of abstracts are accepted.] 2018 M&SOM International Conference (Dallas, TX, USA).
- 17. Y. Xie, L. Yedidsion, and <u>G.B. Yom-Tov</u> "An Invitation Control Policy for Proactive Service Systems: Balancing Efficiency, Value and Service Level," 2017 INFORMS APS Conference (Evanston, IL, USA).
- 18. D. Altman, S. Ashtar, G.B. YomTov, and <u>A. Rafaeli</u> "Text-based Customer Service: Using Big Data to Connect Customer Emotion to Service Operations," 2017 POMS International (Tel-Aviv, Israel).
- 19. <u>G.B. Yom-Tov</u>, A. Rafaeli, D. Altman, S. Ashtar, G. Bar, M. Westphal, D. Spivak, M. Natapov, N. Barkay, and O. Ron "Emotion in Text-based Customer Service: Using Automatic Emotion Detection to Identify Trends and Relationships," 2017 POMS International (Tel-Aviv, Israel).
- R. Carmen, G.B. Yom-Tov, I. Van Nieuwenhuyse, Y. Ofran, and B. Foubert "How Capacity Availability and Capacity Decisions Affect Hematology Patients Health," 2017 POMS International (Tel-Aviv, Israel)
- 21. N. Carmeli, G.B. Yom-Tov, and A. Mandelbaum "Delay Prediction in Healthcare Systems," 2017 POMS International (Tel-Aviv, Israel).
- 22. <u>A. Rafaeli, G.B. Yom-Tov, D. Altman, S. Ashtar, and D. Spivak "Data-driven Studies of Emotion-Behavior Interplay in C2B2C Written Interactions"</u>. 2016 New York City: Connected experiences Labs Second Annual Fall Workshop. (New York, NY, USA)
- D. Altman, D. Cohen, A. Rafaeli, N. Tepper, G.B. Yom-Tov, S. Ashtar, G. Bar, D. Spivak, M. Westphal, and H. Zucker "The Influence of Customer Emotions in Chat-Service Operations". 2016 SERVSIG (Maastricht, Netherlands).
- 24. J. Dong, E. Yom-Tov, and <u>G.B. Yom-Tov</u> "The Impact of Delay Announcements on Hospital Network Coordination and Waiting Times". 2015 M&SOM International Conference (Toronto, Canada), 2015 INFORMS APS Conference (Istanbul, Turkey), 2016 IE&M Conference (Tel-Aviv, Israel).
- 25. <u>G.B. Yom-Tov</u> and T. Gertz "How to Utilize Call Backs: Time-Varying Queues with a Call Back Option," 2014 IE&M Conference (Tel-Aviv, Israel).
- 26. <u>G.B. Yom-Tov</u> and C.W. Chan "Managing Intensive Care Units: Speedup versus Admission Control," 2013 M&SOM International Conference (INSEAD, France), 2014 ORSIS Conference (Tel-Aviv, Israel).
- 27. J. Dong, P. Feldman, and <u>G.B. Yom-Tov</u> "Slowdown Services: Staffing Service Systems with Load-Dependent Service Rate," 2013 INFORMS APS Conference (San Jose, Costa Rica), 2013 M&SOM International Conference (INSEAD, France).
- 28. C.W. Chan, <u>G.B. Yom-Tov</u>, and G. Escobar "Intensive Care Unit Patient Flow with Readmissions: A State-Dependent Queueing Network," 2011 M&SOM International Conference (Ann Arbor, MI,

- USA), 2011 INFORMS Healthcare Conference (Montreal, Canada), 2012 M&SOM International Conference (New York, NY, USA).
- 29. A. Mandelbaum and <u>G.B. Yom-Tov</u> "The Erlang-R Queue: Time-Varying QED Queues with Reentrant Customers in Support of Healthcare Staffing," 2010 M&SOM International Conference (Haifa, Israel), The 16th IE&M Conference (Tel-Aviv, Israel).
- 30. A. Mandelbaum and <u>G.B. Yom-Tov</u> "The Erlang-R Queue: A Model Supporting Personnel Staffing in Emergency Wards". 2009 ORSIS Conference (Herzeliya, Israel).
- 31. A. Mandelbaum and <u>G.B. Yom-Tov</u> "Capacity Management in Hospitals: Semi-Open Queueing Networks in the QED Regime". 2008 M&SOM International Conference (University of Maryland, MD, USA), 2008 ORSIS Conference (Jerusalem, Israel).
- 32. <u>G.B. Yom-Tov</u> and B. Golany "Portfolio Management Approach to Supplier Selection". 2006 ORSIS Conference (Naharia, Israel), 2007 14th IE&M Conference (Tel-Aviv, Israel).

Participation in Organizing Conferences

- 2023 POMS2023 International, Paris, France. Scientific program committee.
- 2018 Service Engineering: From Data to Theory and Practice. Conference co-chair.
- 2018 European Conference on Queueing Theory (ECQT). Scientific program committee.
- 2018 ORSIS Queueing and Probability Day. Conference co-chair.
- 2017 POMS International, Israel. Healthcare operations track program chair.
- 2016 Young European Queueing Theorists (YEQT) Workshop, Eindhoven, Netherlands. Conference organizing committee.

Invited Seminars in Universities

- "Emotional Load: The Human Side of Queueing Systems". USC (11/2022), UT Dalas (11/2022).
- "MyED: Reducing Abandonment and Improving Attitudes in Emergency Departments by Providing Process Information". NYU (6/2022).
- "The Co-Production of Service: Modeling Service Times in Contact Centers Using Hawkes Processes". European TOM seminar series (4/2021), JCT Lev Academic Center (2/2022), SNAPP seminar series (3/2023).
- "Hospitalization vs. Home-Care: Treating haematology patients under scarce capacity". University
 of Cambridge (2/2020), Microsoft Research Cambridge Lab (2/2020).
- "Challenges and Opportunities in Contact Center Operation". LBS (2/2020), Bar-Ilan University (6/2020), Koç University (9/2020).
- "The Influence of Customer Emotions in Service Operations". Ben-Gurion University (3/2018), Boston University (10/2018), NYU (10/2018), Columbia University (10/2018), Cornell University (10/2018), Hebrew University (11/2018), Frankfurt School (12/2019), Maastricht University (12/2019).
- "An Invitation Control Policy for Proactive Service Systems: Balancing Efficiency, Value and Service Level". Eindhoven University of Technology (5/2017).
- "On the Connection Between Customer Emotions and Operations in Services Systems". UCL (5/2017), KU Leuven (12/2017).
- "The Impact of Delay Announcements on Hospital Network Coordination and Waiting Times". CUHK (9/2016).
- "Managing Intensive Care Units: Speedup versus Admission Control". VU Amsterdam (1/2014).
- "Slowdown Services: Staffing Service Systems with Load-Dependent Service Rate". Tel-Aviv University (3/2013), Haifa University (12/2013), KU Leuven (1/2014), Eindhoven University of Technology (1/2014).

- "Does Speedup Reduce Congestion? An Examination of Intensive Care Units with Readmissions". Princeton University (2/2012), Tel-Aviv University (1/2012), Ben-Gurion University (1/2012), Technion (1/2012), Hebrew University (1/2012).
- \bullet "The Erlang-R Queue: Time-Varying QED Queues with Reentrant Customers in Support of Healthcare Staffing". Penn State University (1/2010), NYU (9/2011).

Working Papers

- 1. (*) J.S.H. van Leeuwaarden, B.W.J. Mathijsen, <u>F. Sloothaak</u> and G.B. Yom-Tov^c "The restricted Erlang-R queue: Finite-size effects in service systems with returning customers".
- 2. <u>S. Ashtar</u>, G.B. Yom-Tov^c, and A. Rafaeli "Customer Emotion and Control as Demands and Resources for Customer Service Agents: Predicting the Length of Unscheduled Microbreaks".
- 3. G.B. Yom-Tov^c, B. Foubert, <u>R. Carmen</u>, I. van Nieuwenhuyse, and Y. Ofran, "Capacity Planning in Hematology Wards: Control for Infection Risks".

Current Research in Progress

- 1. (*) Matias Kohn, Anat Rafaeli, and Galit B. Yom-Tov c , "The Effect of Procedural and Distributive Justice on Patient LOS" (expected 7/23).
- 2. (*) Andrew Daw and Galit B. Yom-Tov^c, "Asymmetries of Service Co-production: Modeling Interdependence and Synchronicity Between Customer and Agents" (expected 8/23).
- 3. MoonSoo Cho, Monika Westphal^c, Anat Rafaeli, Galit B. Yom-Tov "Information Salience in Consumer Contracts: Consumers Are More Likely to Sign Contracts if Camouflaged Information is Unveiled". (expected 9/23)
- 4. (*) Yamit Leon and Galit B. Yom-Tov^c, "Managing Admissions to National Parks" (expected 9/23).
- 5. N. Carmeli, G.B. Yom-Tov and Avishai Mandelbaum, "Balancing emotional load in service systems". (expected 10/23)
- 6. (*) Galit B. Yom-Tov^c and Anat Rafaeli, "How Does Customer Sentiment Effect Service Agents Prioritization Choice Among Customers" (expected 12/23).