### **CURRICULUM VITAE**

NAME Associate Professor Raviv Tal 024391047

Status Married + 2

Faculty/Dept. Engineering / Industrial engineering

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**Home Address** Moshe Kol 7/1, Tel Aviv, 052-2562223

Date and place of

birth

6.6.1969, Israel

Education

1990-1993 Tel Aviv University, Tel Aviv, Israel

**Economics** 

BA

June 1994

1994-1997 Tel Aviv University, Tel Aviv, Israel

Business administration, major Information System,

MBA June 1998

1998-2003 Technion, Haifa. Israel

Operations Research and Systems Analysis

Ph.D. May 2004,

**Title of Doctoral Dissertation**: Solving Hard Combinatorial

Problems Using Fluid Approximation Approach.

Names of Supervisors: Michal Penn, Shmuel Onn.

**Academic experience** 

2003-2004 University of Haifa, Haifa, Israel

The Caesarea Edmond Benjamin de Rothschild Foundation Institute

for Interdisciplinary Applications of Computer Science

	Visiting Scholar
2004-2006	University of British Columbia, Vancouver Sauder School of Business, Operations & Logistics Division Postdoctoral Research Associate
2006-2012	Tel Aviv University, Tel Aviv, Israel Department of Industrial Engineering Lecturer
2012-2018	Tel Aviv University, Tel Aviv, Israel Department of Industrial Engineering Senior Lecturer
2018-	Tel Aviv University, Tel Aviv, Israel Department of Industrial Engineering Associate Professor
2015 -2019	Tel Aviv University, Tel Aviv, Israel Department of Industrial Engineering Head of the undergraduate program
2017-	Tel Aviv University, Tel Aviv, Israel Department of Industrial Engineering Head of the Shlomo Shmelzer institute for smart transportation
2021-2023	Tel Aviv University, Tel Aviv, Israel Department of Industrial Engineering Department head

# Active participation in scientific meetings

Year	Name of Meeting, City, Country	Role
2001	The 3 <sup>rd</sup> Aegean International Conference on Design and Analysis of Manufacturing Systems, Tinos, Greece	Coauthor
2001	The annual ORSIS meeting, Zikhron Yakov, Israel	Speaker
2002	International Symposium on Combinatorial Optimization Paris, France	Speaker
2002	30 <sup>th</sup> International Conference on Computers and Industrial Engineering, Tinos, Greece	Speaker

2002	INFORMS Annual Meeting, San Jose, USA	Speaker
2003	The annual ORSIS meeting, Ma'ale Ha'hamisha,	Speaker
	Israel	
2003	The 20th European Summer Institute on supply chain management, Grainou, Germany	Speaker
2003	INFORMS Annual Meeting, Atlanta, USA	Speaker
2004	4 <sup>th</sup> Haifa Workshop on Interdisciplinary Applications of Graph Theory and Algorithms, Haifa, Israel	Speaker
2004	The annual ORSIS meeting, Ashkelon, Israel	Speaker
2004	INFORMS Annual Meeting, Denver, USA	Speaker in a sponsored session, Session Chair
2005	The annual ORSIS meeting, Caesarea, Israel	Speaker
2005	INFORMS Annual Meeting, San Francisco, CA, USA	Speaker in a sponsored session
2006	CORS, Montreal, Canada	Speaker
2007	The Third Israeli Industrial Engineering Research Meeting, Tel Aviv, Israel	Speaker
2007	The annual ORSIS meeting, Ma'ale Ha'hamisha, Israel	Speaker
2007	INFORMS Annual Meeting, Seattle, WA, USA	Speaker
2008	International Conference on Industrial Logistics, Tel Aviv, Israel	Speaker, Coauthor
2009	The annual ORSIS meeting, Herzliya, Israel	Chair of the organizing committee
2009	4 <sup>th</sup> Odysseus Workshop, Izmir, Turkey	Speaker

2009	CORS/INFORMS International Meeting, Toronto, Canada	Speaker
2010	7 <sup>th</sup> Triennial Symposium on Transportation Analysis (TRISTAN), Tromsø, Norway	Speaker, Coauthor
2010	INFORMS annual meeting, Austin, Text, USA	Speaker
2010	Annual Conference of the Manufacturing and Service Operations Management Society (MSOM), Haifa, Israel	Session Chair, Coauthor
2011	The annual ORSIS meeting, Akko, Israel	Session Chair, Speaker
2011	INFORMS annual meeting, Charlotte, North Carolina, USA	Organizer of a track Session Chair, Speaker, Coauthor
2012	5 <sup>th</sup> Odysseus Workshop, Mykonos, Greece	Speaker
2012	The annual ORSIS meeting, Ma'ale Ha'hamisha, Israel	Session Chair, Speaker
2012	1st VeRoLog Workshop, Bologna, Italy	Speaker
2012	21 <sup>st</sup> International Symposium on Mathematical Programming (ISMP), Berlin, Germany	Speaker
2013	The Sixth Israeli Industrial Engineering Research Meeting, Maale Hamisha, Israel	Coauthor
2013	The annual ORSIS meeting, Beer Sheva, Israel	Session Chair, Coauthor
2013	The 26 <sup>th</sup> European Conference on Operational Research, Rome, Italy	Sessions Chair, Speaker
2013	2 <sup>nd</sup> VeRoLog Workshop, Southampton, UK	Coauthor
2013	Joint 2nd Workshop of the Turkish and Israeli Operations Research Societies (WITOR), Tel Aviv, Israel	Coauthor, Participant
2014	The annual ORSIS meeting, Tel Aviv, Israel	Session Chair, Speaker, Coauthor

2014	3 <sup>rd</sup> VeRoLog Workshop, Oslo, Norway	Speaker, Coauthor
2015	The annual ORSIS meeting, Haifa, Israel	Session Chair, Speaker, Coauthor
2015	4 <sup>th</sup> VeRoLog Workshop	Speaker, Coauthor, Session Chair
2016	The annual ORSIS meeting, Maale Hamisha, Israel	Speaker
2016	Route 2016 - International workshop on vehicle routing, intermodal transport and related areas, Rambouillet, France	Speaker, participation by invitation only
2016	5th VeRoLog Workshop, Nantes, France	Speaker
2017	The annual ORSIS meeting, Ramat Gan, Israel	Session chair, speaker and a coauthor of four presentations
2017	POMS international conference, Tel Aviv, Israel	Speaker, Coauthor
2017	6 <sup>th</sup> VeRoLog Workshop, Amsterdam	Speaker
2017	hEART 2017: 6 <sup>th</sup> Symposium of the European Association for Research in Transportation, Haifa, Israel	Participant, Reviewer, Coauthor
2017	Smart Cities, Potentials, Prospects and Discontent, Israel, Tel Aviv	Speaker
2017	Workshop on Smart Logistics - A Revolution in the Making, Tel Aviv	Co-organizer, Speaker
2017	University of Denver, Israel conference: Impact of Driverless Mobility	Panel speaker
2018	15th CEMS Research Seminar on supply chain management, Austria, Riezlern	Speaker, Coauthor
2018	Workshop on Optimization and Discrete Geometry: Theory and Practice, Tel Aviv	Co-organizer
2018	The annual ORSIS meeting, Beer Sheva, Israel	Stream organizer, Coauthor, Session Chair

2018	Route 2018 - International workshop on vehicle routing, Copenhagen, Denmark	Speaker, participation by invitation only
2018	7 <sup>th</sup> Odysseus Workshop, Cagliari, Italy	Coauthor of two papers
2019	SAE Connected and automated vehicle conference, Ramat Gan, Israel	Speaker
2019	16th CEMS Research Seminar on supply chain management, Riezlern, Austria	Speaker, Session Chair
2019	The annual ORSIS meeting, Shfayim, Israel	Member of the organizing committee
2019	INFORMS TSL Society Workshop, Vienna, Austria	Speaker, Member of the scientific committee
2020	17th CEMS Research Seminar on supply chain management, Riezlern, Austria	Speaker, Session Chair
2021	18th CEMS Research Seminar on supply chain management, Online event	Speaker
2021	The annual ORSIS meeting, Technion, Haifa	Speaker, Session Chair
2021	The 1st ISTRC21 Annual Conference, Tel Aviv	Member of the organizing committee
2022	19th CEMS Research Seminar on supply chain management, Online event	Panel leader
2022	Route 2022 - International workshop on vehicle routing, Copenhagen, Denmark	Speaker, participation by invitation only
2022	The annual ORSIS meeting, Jerusalem	Speaker, Session Chair
2022	VeRoLog 2022 workshop, Hamburg	
2023	20th CEMS Research Seminar on supply chain management, Riezlern, Austria	Speaker

2023	The annual ORSIS meeting, Tel Aviv	Co-author, Session Chair
2023	Jon-Shmuel Halfway to Twelfty, École des Ponts, Marne- la-Vallée, France (a workshop on combinatorial optimization)	Speaker (by invitation only)
2023	INFORMS Transportation and Logistics Society Second Triennial Conference, Chicago, Illinoi	Co author

# Academic and professional awards

# **Internal Grants (at TAU)**

Year	Foundation	Title	Sum NIS (My Share)	Co- researchers	P.I.
2009	Tel Aviv University	Vice President for Research and Development Grant	14,000 (7,000)	Michal Tzur	CO-PI
2010	Tel Aviv University	Vice President for Research and Development Grant	14,000 (7,000)	Michal Tzur	CO-PI
2019- 2022	The Koret Foundation	Effective and Equitable Technology in the Digital Era	534,982 (267,491)	Michal Tzur	CO-PI
2020- 2022	The AI and data science center	From Data to Algorithms and Back: Making Urban Public Transport Adaptive	300,000 (150,000)	Itzhak Benenson	CO-PI

### **External Grants**

Year	Foundation	Title	Sum NIS (My Share)	Co- researchers	P.I.
2011- 2014	ISF	Bicycle sharing	304,200 (152,100)	Michal Tzur	CO-PI
2013- 2016	Ministry of Science & Technology	User-oriented security: a multidisciplinary approach	868,883 (96,015)	Irad Ben-Gal, Joachim Meyer, and Eran Toch	CO-PI
2014- 2015	The center for innovation in transportation in the prime minister office	Crowdsourcing of package delivery	100,000 (50,000)	Michal Tzur	CO-PI
2015- 2018	Ministry of Science & Technology	Design and operation of a crowdsourced package delivery system	1,150,920 (331,200)	Eran Toch and Michal Tzur	CO-PI
2016- 2019	The center for innovation in transportation in the prime minister office	A Demand Responsive Feeder Service for Train Stations	260,000 (30,000)	Hillel Bar- Gera and Gadi Rabinowitz	CO-PI
2017- 2020	ISF	Time-dependent and stochastic field service routing and scheduling	375,000	-	PI
2020- 2024	ISF	Physical internet design and operation for dynamic delivery of parcels	516,000 (258,000)	Michal Tzur	CO-PI

2021- ISTRC Dynamic 299,000 Yuval Hadas PI	PI
capacity management for sustainable public transportation service  [180,000]	

#### **Scholarships**

- 1. A Scholarship for Excellence at the Technion 1999-2003.
- 2. A scholarship for excellent Ph.D. students from the "National Committee for Academic Planning and Budgeting (VATAT)", 2001-2003.

#### **Prizes**

- 1. The 2002 Mitchner Award in Quality Sciences and Quality Management (with Michal Penn), 2nd Prize. The prize is awarded at the Technion for a paper on the subject of Quality Control. The title of the winning paper is "Solving the Quality Control Station Configuration Problem Using Fluid Approximation".
- 2. The winner of the 2010 INFORMS Railway Application Section (RAS) Problem Solving Competition (with Mor Kaspi), 1st Prize. The prize was awarded at the RAS business meeting during the 2010 INFORMS annual meeting in Austin, Texas.
- 3. The winner of the 2017 ORSIS Click software challenge in the general category. The prize was awarded in the 2017 ORSIS meeting, in Ramat Gan.

### **Membership in Professional Societies**

- 2000- ORSIS Operations Research Society of Israel
- 2004- INFORMS
- VeRoLog, Working Group on Vehicle Routing and Logistics Optimization within EURO, the Association of the European Operational Research Societies

#### **Postdoctoral Students**

2021-2023 Dr. Claudio Szwarcfiter (co-hosted with Yossi Bukchin)

Design and operation of physical internet two-sided platform for full track

load transportation

#### **Past Doctoral Students**

2008-2016 Dr. Iris Forma (co-advised with Michal Tzur)

"Decomposition Methods for Solving Transportation Problems in Supply

Chains and in Bike-Sharing Systems"

Graduated in 2017

2011-2016 Dr. Mor Kaspi (co-advised with Michal Tzur)

"Bike-sharing systems: parking reservation policies and maintenance

operations."

Awarded the 2017 best doctoral dissertation prize of VeRoLog (Working Group on Vehicle Routing and Logistics Optimization within EURO, the Association

of the European Operational Research Societies)

2013-2021 Dr. Yifat Douek Pinkovich (co-advised with Irad Ben-Gal)

"Optimal configuration of sensors"

2016-2021 Dr. Ido Orenshtein

"Delivery Processes Using Automated Parcel Lockers"

2016-2023 Edison Avraham

"Time-dependent and stochastic field service routing and scheduling"

#### **Current Doctoral Students**

2022- Gabriel Deza (co-advised with Michal Tzur)

"Optimal operation of a hyperconnected network for parcel delivery"

(tentative)

### Past M.Sc. Students with a thesis

2008-2010	Shikma Aharonov (co-advised with Yossi Bukchin) "Integrated Assembly Line Balancing and Inspection Allocation Problem in an Online Rework Environment"
2008-2010	Dr. Mor Kaspi "Service Oriented Train Timetabling."
2010-2012	Ofer Kolka "Dynamic Management of Stock Levels in a Bike Sharing System"
2009-2013	Zohar Postelnick (co-advised with Irad-Ben Gal) "Optimal Design of Web Sites"
2011-2014	Dana Pessach (co-advised with Michal Tzur) "Dynamic repositioning in Bike-Sharing System"
2011-2014	Gil Einy "The Stochastic Battery Switching Station Scheduling Problem"
2012-2015	Edison Avraham (co-advised with Evgeni Khmelnitsky) "The Decentralized Field Service Routing Problem"  Awarded the second prize in the 2017 student paper competition of the Israeli IE organization
2013-2016	Sharon Datner (co-advised with Michal Tzur) "Setting Inventory Levels in a Bike Sharing Network"
2013-2016	Yuval Elbar "The Mixed Transit Fleet Bus Scheduling Problem"
2019-2022	Shir Tavor "Anticipatory rebalancing of RoboTaxi systems"

### Current M.Sc. Students with a thesis

2021- Shachar Eizen (co-advised with Michal Tzur)
"Dynamic routing of parcel in physical internet" (tentative)

2021- Hila Nitshel (co-advised with Irad Ben-Gal)
Optimization methods for feature selection

#### M.Sc. Students with a project

2008	Yaara Schribman "Optimal Configuration of Spare Parts Supply Network"
2010	Alon Solomon "Assembly line balancing problem with capability constraints"
2014	Hila Ben-David Galili (co-advised with Mor Kaspi, a Ph.D. student at that time)  "Reservation policies in shared mobility system – a simulation study"
2020	Kfir Siton "Puzzle based storage systems with AGVs"
2022	Sapir Amsalem (co-advisee with Ilit Oppenheim) Acceptance of fixed line flexible capacity bus service

## Peer-reviewed papers

Citations (Web of Science) 1405 times, h-index: 17, i-10 index 21, updated: 11/6/2023 Citations (Google Scholar) 2708 times, h-index: 21, i-10 index 28, updated: 18/6/2022

#### Published and accepted

- Gad Alon, Dirk P. Kroese, <u>Tal Raviv</u> and Reuven Rubinstein, "Application of the Cross-Entropy Method to the Buffer Allocation Problem in a Simulation-Based Environment", <u>Annals of Operations Research</u>, 134 (2005) 137-151 Impact Factor (2015): 0.525 (1.406), currently Q1 (Management Science and Operations Research, Decision Science (miscellaneous))
- Wade D. Cook, Boaz Golany, Moshe Kress, Michal Penn and <u>Tal Raviv</u>, "Optimal Allocation of Proposals to Reviewers to Facilitate Effective Ranking", *Management Science*, 51 (2005) 655-661

Impact Factor (2015): 1.669 (2.741), Q1 (Management Science and Operations Research, Strategy and Management)

#### 3. Wade D. Cook, Boaz Golany, Michal Penn and Tal Raviv,

"Creating a Consensus Ranking of Proposals from Reviewers' Partial Ordinal Rankings", Computers & Operations Research, 34 (2006) 954-965

2020 Impact Factor 4.008, Q1 (Management Science and Operations Research, Modeling and Simulation, Computer Science (miscellaneous))

#### 4. Michal Penn and <u>Tal Raviv</u>,

"Optimizing the Quality Control Station Configuration",

Naval Research Logistics, 54 (2007) 301-314.

2020 Impact Factor: 1.494, Q1 (Management Science and Operations Research,

Modeling and Simulation)

#### 5. Michal Penn and <u>Tal Raviv</u>,

"A Polynomial Time Algorithm for Solving a Quality Control Station Configuration Problem",

Discrete Applied Mathematics, 156 (2008) 412-419.

2015 Impact Factor: 0.783 (0.722), Q2

#### 6. Michal Penn and Tal Raviv,

"An Algorithm for the Maximum Revenue Jobshop Problem", European Journal of Operational Research, 193 (2009) 437-450.

2020 Impact Factor 5.334, Q1 (Management Science and Operations Research,

Information Systems and Management, Modeling and Simulation)

#### 7. Wade D. Cook, Tal Raviv, and Alan J. Richardson,

"Aggregating Incomplete Lists of Journal Rankings: An Application to Academic Accounting Journals",

Accounting Perspectives, 9 (2010) 217-235,

2020 Impact Factor: 0.64, Q3 (Accounting, Finance)

#### 8. Danny Granot, Frieda Granot, and Tal Raviv,

"On Competitive Location in a Network",

European Journal of Operational Research, 205 (2010) 301–312

2020 Impact Factor 5.334, Q1 (Management Science and Operations Research,

Information Systems and Management, Modeling and Simulation)

#### 9. Tal Raviv and Mor Kaspi\*,

"The Locomotive Fleet Fueling Problem",

Operations Research Letters, 40 (2012) 39-45

2020 Impact Factor: 1.154, Q1 (Industrial and Manufacturing Engineering)

A preliminary version of this paper won first prize in 2010 INFORMS RAS Problem Solving Competition

#### 10. Tal Raviv,

"The Battery Switching Station Scheduling Problem",

Operations Research Letters 40 (2012) 546–550,

2020 Impact Factor: 1.154, Q1 (Industrial and Manufacturing Engineering)

#### 11. Tal Raviv,

"An Efficient Algorithm for Maximizing the Expected Profit from a Serial Production Line with Inspection Stations and Rework",

OR-Spectrum 35 (2013), 609-638

Impact Factor: 1.41, Q1 (Management Science and Operations Research)

#### 12. Tal Raviv and O. Kolka\*,

"Optimal Inventory Management of a Bike-Sharing Station",

IIE Transactions 45 (2013), 1077-1093

2015 Impact Factor: 1.65, Q1 (Industrial and Manufacturing Engineering)

#### 13. Mor Kaspi\* and Tal Raviv,

"Service Oriented Train Timetabling",

*Transportation Science*, 47 (2013), 295-311,

2015 Impact Factor: 3.295, Q1 (Transportation, Civil and Structural Engineering)

#### 14. Tal Raviv, Michal Tzur, and Iris Forma\*,

"Static Repositioning in a Bike-Sharing System : Models and Solution Approaches",

EURO Journal of Transportation and Logistics 2(2013), 187-229

The journal was not ranked yet when the paper was accepted it is currently Q1 (Management Science and Operations Research, Transportation, Modeling and Simulation)

This paper is the most cited paper in the history of the journal.

#### 15. Nicole Adler, A. Shalom Hakkert, Johnathan Kornbluth, <u>Tal Raviv</u>, Mali Sher\*,

"Location-allocation models for traffic police patrol vehicles on an interurban network", *Annals of Operation Research* 221 (2014), 9-31,

2015 Impact Factor: 1.103 (1.406), Q1 (Management Science and Operations Research, Decision Science (miscellaneous))

#### 16. Michael Masin and Tal Raviv,

"Linear Programming-Based Algorithms for the Minimum Makespan High Multiplicity Jobshop Problem"

Journal of Scheduling, 17:4 (2014), 321-338

Impact Factor (2015): 1.028 (1.023), Q1

#### 17. Mor Kaspi\*, <u>Tal Raviv</u>, Michal Tzur,

"Parking reservation policies in one-way vehicle sharing systems", *Transportation Research Part B: Methodological*, 62 (2014), 35-50

Impact Factor (2015): 2.952 (3.769), Q1 (Management Science and Operations Research, Transportation, Civil and Structural Engineering)

#### 18. Nicole Adler, A. Shalom Hakkert, <u>Tal Raviv</u>, and M. Sher\*,

"The traffic police location and schedule assignment problem",

Journal of Multi-Criteria Decision Analysis 21 (2014), 315–333

Impact Factor (2015): 0.71 (1.14), Q2

#### 19. Iris Forma\*, Tal Raviv, Michal Tzur

A 3-Step Math Heuristic for the Static Repositioning Problem in Bike-Sharing Systems, *Transportation Research Part B*, 71 (2015), 230-247

2015 Impact Factor: 3.769, Q1 (Management Science and Operations Research, Transportation, Civil and Structural Engineering)

#### 20. Mor Kaspi\*, Tal Raviv, Michal Tzur,

Detection of Unusable Bicycles in Bike-Sharing Systems

Omega, 65 (2016), 10-16

2014 Impact Factor: 4.376, Q1 (Management Science and Operations Research, Strategy and Management, Information Systems and Management)

#### 21. Mor Kaspi\*, Tal Raviv, Michal Tzur, Hila Galili\*

Regulating vehicle sharing systems through parking reservation policies: Analysis and performance,

European Journal of Operational Research, 251:33 (2016), 969–987

2020 Impact Factor 5.334, Q1 (Management Science and Operations Research,

Information Systems and Management, Modeling and Simulation)

# 22. Zohar Postelnicu\*, <u>Tal Raviv</u>, Irad Ben-Gal, Improving Websites' Quality of Service by Shortening their Browsing Expected Path Length

Quality and Reliability Engineering International, 32 (2016), 2017-2031

2015 Impact Factor: 1.457, Q1

#### 23. Mor Kaspi\*, Tal Raviv, Michal Tzur,

Bike Sharing Systems: User Dissatisfaction in the Presence of Unusable Bicycles, *IISE Transactions*, 49:2 (2017), 144-158

2020 Impact Factor: 2.681, Q1 ((Industrial and Manufacturing Engineering)

#### 24. Edison Avraham\*, <u>Tal Raviv</u>, E. Khmelnitsky,

The Decentralized Field Service Routing Problem,

Transportation Research Part B, 104 (2017), 290-316

2016 Impact Factor: 3.769, Q1 (Management Science and Operations Research, Transportation, Civil and Structural Engineering)

#### 25. Yossi Bukchin, Tal Raviv,

"Constraint Programming for Solving Various Assembly Line Balancing Problems", *OMEGA*, 78 (2018), 57-68

2016 Impact factor: 4.029, Q1 (Management Science and Operations Research, Strategy and Management, Information Systems and Management)

#### 26. Sharon Datner\*, Tal Raviv, Michal Tzur, and Daniel Chemla\*

"Setting Inventory Levels in a Bike Sharing Network", *Transportation Science*, 53 (2019), 62-76

2016 Impact Factor: 3.275, Q1 (Transportation, Civil and Structural Engineering)

#### 27. Ido Orenstein\*, Tal Raviv, Elad Sadan\*

"Delivery Process with Flexibility Using Automated Parcel Locker",

EURO Journal of transportation and logistics (2019) 8:683-711

2020 impact factor: 1.739, Q1 (Management Science and Operations Research,

Transportation, Modeling and Simulation)

#### 28. Edison Avraham\*, <u>Tal Raviv</u>

"The data-driven time-dependent traveling salesperson problem",

*Transportation Research Part B* (2020) 134:25-40,

2019 Impact Factor: 4.796, Q1 (Management Science and Operations Research, Transportation, Civil and Structural Engineering)

#### 29. Yossi Bukchin, <u>Tal Raviv</u>, Ilya Zaides

"The Consecutive Multiprocessor Job Scheduling Problem", European Journal of Operational Research (2020) 427-438,

2019 Impact Factor 4.213, Q1 (Management Science and Operations Research, Information Systems and Management, Modeling and Simulation)

#### 30. Yifat Douek-Pinkovich\*, Irad Ben-Gal, <u>Tal Raviv</u>,

"The generalized test collection problem,"

TOP (2021) 372-386

2019 Impact Factor: 1.452, Q2 (Management Science and Operations Research, Modeling and Simulation)

#### 31. Omer Dumbinsky, Joachim Mayer, Tal Raviv,

"Alerting about possible risks vs. blocking risky choices: A quantitative model and its empirical evaluation,"

Computers & Security (2020), 101944

2019 Impact factor 3.579, Q1 (Computer Science (miscellaneous))

#### 32. Michal Penn, Tal Raviv

"Complexity and algorithms for min cost and max profit scheduling under time-of-use electricity tariffs," *Journal of Scheduling* (2021), (24)1, 83-102

2020 Impact Factor 1.802, Q1 (Engineering (miscellaneous))

#### 33. Edison Avraham\*, Tal Raviv

"The steady-state mobile personnel booking problem,"

Transportation Research Part B. 154 (2021), 266-288

2020 Impact Factor: 5.596, Q1 (Management Science and Operations Research, Transportation, Civil and Structural Engineering)

#### 34. Lu Xing, Tal Raviv, Lina Sela

"Sensor Placement for Robust Burst Identification in Water Systems: Balancing Modeling Accuracy, Parsimony, and Uncertainties,"

Advanced Engineering Informatics, 51 (2022), 101484

2020 Impact factor 5.603, Q1 (Artificial intelligence, information systems)

#### 35. Yifat Douek-Pinkovich\*, Irad Ben-Gal, Tal Raviv

"The Stochastic Test Collection Problem: Models, Exact, and Heuristic Solution Approaches", European Journal of Operational Research, 299 (2022), 945-959

2020 Impact factor: 5.334, Q1 (Management Science and Operations Research, Information Systems and Management, Modeling and Simulation)

#### 36. Mor Kaspi, Tal Raviv, Marlin Ulmer

"Directions for future research on urban mobility and city logistics" *Networks*, 79:3 (2022), 253-263

2020 Impact factor: 5.059, Q1 (Computer Networks and Communications, Information Systems, Software)

#### 37. Ido Orenstein\*, <u>Tal Raviv</u>

"Parcel Delivery Using the Hyperconnected Service Network,"

Transportation Research Part E, 161(2022), 102716

2021 Impact factor: 10.047, Q1 (Transportation, Management Science and Operations Research)

#### 38. Tal Raviv, Yossi Bukchin, René de Koster

"Optimal retrieval in puzzle-based storage systems using automated mobile robots", *Transportation Science* 57:2 (2023), 424-443,

2020 Impact factor: 4.117, Q1 (Transportation, Civil and structural engineering)

#### 39. Yossi Bukchin, Tal Raviv

"A comprehensive toolbox for load retrieval in puzzle-based storage systems with simultaneous movements", *Transportation Research Part B*, 166 (2022) 348-373 2021 impact factor: 7.632, Q1 (Transportation, Civil and Structural Engineering,

Management Science and Operations Research)

#### 40. Shir Tavor\*, Tal Raviv

"Anticipatory rebalancing of RoboTaxi systems",

Transportation Research Part C, 153(2023) 104196

2022 impact factor 9.022, Q1 (Transportation, Management Science and Operations Research, Computer Science Applications, Civil and structural engineering)

#### 41. Edison Avraham \*, Tal Raviv

"The data-driven time-dependent orienteering problem with soft time windows",

EURO journal of transportation and logistics, 12(2023) 100112

2022 Impact Factor 1.5666, Q1 (Transportation, Management Science and Operations Research, Modeling and Simulation)

#### 42. Tal Raviv

"The service points' location and capacity problem", Accepted in Transportation Research Part E (29/6/2023)

2021 Impact factor: 10.047, Q1 (Transportation, Management Science and Operations Research)

#### Papers presented at scientific meetings published as proceedings

1. Gad Alon, <u>Tal Raviv</u>, Reuven Rubinstein,

Solving the Buffer Allocation Problem Using the Cross Entropy Method, Invited Talk *The 3<sup>rd</sup> Aegean International Conference on Design and Analysis of Manufacturing Systems*, Tinos, Greece, May 2001

#### 2. Michal Penn, Tal Raviv,

Designing a Quality Control System in a Serial Production Line 30th International Conference on Computers and Industrial Engineering, Greece, July 2002

#### 3. Michal Penn, Tal Raviv,

On the infinite horizon Maximum Profit Job Shop Problem The Third Israeli Industrial Engineering Research Meeting, Tel Aviv, March 2007, 15 pages

#### 4. Iris Forma\* and Michal Tzur, and Tal Raviv

A Model for Planning of Production, Inventory and Combined Routing of Delivery and Pick-Up

International Conference on Industrial Logistics, Tel Aviv, March 2008

#### 5. Shikma Aharonov\*, Yossi Bukchin, and Tal Raviv

Integrated Assembly Line Balancing and Inspection Allocation Problem in an Online Rework Environment

International Conference on Industrial Logistics, Tel Aviv, March 2008

#### 6. Iris Forma\*, Michal Tzur, <u>Tal Raviv</u>

Functional Decompositions for a Production and Distribution System *INCOM '09*, Moscow, May 2009

#### 7. Iris Forma\* and Michal Tzur, and Tal Raviv

Repositioning in a Bike-Sharing System 4th *Odysseus Workshop*, Izmir, Turkey, May 2009

#### 8. Mor Kaspi\* and Tal Raviv,

Service Oriented Train Timetabling

7<sup>th</sup> Triennial Symposium on Transportation Analysis (TRISTAN), Tromsø, Norway, June 2010

#### 9. Iris Forma\*, <u>Tal Raviv</u>, and Michal Tzur,

The Static Repositioning Problem in a Bike-Sharing System.

7<sup>th</sup> Triennial Symposium on Transportation Analysis (TRISTAN), Tromsø, Norway, June 2010

#### 10. Mor Kaspi\* and Tal Raviv,

Service Oriented Train Timetabling

Annual Conference of the Manufacturing and Service Operations Management Society (MSOM), Haifa, Israel, June 2010

#### 11. Mor Kaspi\* and Tal Raviv,

The locomotive fleet fueling problem

5th Odysseus Workshop, Mykonos, Greece, May 2012

# 12. Hillel Bar-Gera, Shalomo Beycheck\*, Gadi Rabinowitz and <u>Tal Raviv</u>, Share a ride to the train station using a demand-responsive feeder service

6<sup>th</sup> hEART symposium, Haifa, Israel, September 2017 (acceptance rate 66%)

#### 13. Edison Avraham\* and Tal Raviv.

The stochastic and time-dependent single vehicle field service personnel routing and scheduling problem

7<sup>th</sup> Odysseus Workshop, Cagliari, Italy, June 2018

#### 14. Eyal Tenzer\* and Tal Raviv.

Crowd-shipping of small parcels in a physical internet

7<sup>th</sup> Odysseus Workshop, Cagliari, Italy, June 2018

#### 15. Ido Orenstein\* and Tal Raviv.

Reliable Parcel Routing Policy in a Physical Internet

Tristan X - The Tenth Triennial Symposium on Transportation Analysis, Hamilton, Australia, June 2019

#### 16. Oksana Pecherski\*, Tal Raviv, Hillel Bar-Gera,

Partially Flexible Demand Responsive Transit (DRT): Feeder Service to Railways,

The Transportation Research Board (TRB) 102nd Annual Meeting,

Washington DC, USA, January 2023

#### 17. Yossi Bukchin, Tal Raviv

An efficient MILP formulation for the parallel-load retrieval in puzzle-based storage systems with simultaneous load movements International Material Handling Research Colloquium (IMHRC 2023) Dresden, Saxony, Germany, June 2023

18. Shchar Eizen\*, Tzur Michal, , Tal Raviv
Dynamic parcel routing in hyper-connected networks

INFORMS Transportation and Logistics Society Second Triennial Conference Chicago, Illinois, USA, July 2023

#### Abstracts of presentations in scientific meetings

1. Michal Penn, Tal Raviv,

Approximation Procedure for the High Multiplicity Job Shop Problem *The annual ORSIS meeting*, Zikhron Yakov, Israel, 2001.

2. Michal Penn, Tal Raviv,

Optimal Configuration of Quality Control Stations in a serial Production Line – A Fluid Approach Method

International Symposium on Combinatorial Optimization, Paris, France, April 2002.

3. Michal Penn, Tal Raviv,

Solving the Infinite Planning Horizon Vehicle Routing Problem *INFORMS Annual Meeting*, San Jose, November 2002

4. Michal Penn, Tal Raviv,

Solving the Infinite Planning Horizon Vehicle Routing Problem The 20<sup>th</sup> European Summer Institute on supply chain management, Grainou, Germany, August 2003

5. Michal Penn, Tal Raviv,

Solving the Shift Staffing Problem Using a Columns Generation Technique *The annual ORSIS meeting*, Ma'ale Ha'hamisha, Israel, May 2003

6. Michal Penn, Tal Raviv,

Solving the Long Run Maximum Profit Job Shop Problem *INFORMS Annual Meeting*, Atlanta, October 2003

7. Michal Penn, Tal Raviv,

A Polynomial Time Algorithm for Solving a Quality Control Station Configuration Problem

4<sup>th</sup> Haifa Workshop on Interdisciplinary Applications of Graph Theory and Algorithms, April, 2004.

- 8. Wade Cook, Boaz Golany, Moshe Kress, Michal Penn, Tal Raviv Optimal Allocation of Proposals to Reviewers to Facilitate Effective Ranking *The annual ORSIS meeting,* Ashkelon, Israel, May 2004
- 9. Tal Raviv

Application of CE for Management of Multi-Echelon Supply Network, *INFORMS Annual Meeting*, Denver, October 2004, sponsored session

- 10. Daniel Granot, Frieda Granot, Tal Raviv On Stackelberg-Hotelling Game *The annual ORSIS meeting*, Caesarea, Israel, May 2005
- 11. D. Granot, F. Granot, T.Raviv

  On Stackelberg-Hotelling Game, sponsored session

  INFORMS Annual Meeting, San Francisco, November 2005,
- 12. D. Granot, F. Granot, T.Raviv On Competitive Location in Network, invited talk CORS / Optimization Days Joint Conference, Montreal, May 2006
- 13. S. Aharonov\* and J. Bukchin, *Tal Raviv The annual ORSIS meeting*, Ma'ale Ha'hamisha, Israel, May 2007

  Assembly Line Balancing with Inline Rework
- 14. M. Masin, Tal Raviv,LP Based Dispatching Rule for JobshopINFORMS Annual Meeting, Seattle, November 2007
- 15. O. Kolka\* and Tal Raviv, Optimal Stock Level in Stations of a Bike-Sharing System, CORS/INFORMS International Meeting, Toronto, Canada, July 2009
- 16. Mor Kaspi\* and Tal RavivThe Locomotives Fueling ProblemA presentation in RAS competition finalist session

#### INFORMS annual meeting, Austin, Texas, November 2010

# 17. Tal Raviv, Edison Avraham\*, O. Kolka\*, The Right Size of Bike Rental Stations *INFORMS annual meeting*, Charlotte, North Carolina, November 2011

#### 18. Mor Kaspi\* and Tal Raviv

The Locomotives Fleet Fueling Problem

The annual ORSIS meeting, Akko, Israel, May 2011

# 19. Michal Tzur, D. Pesach\*, Tal Raviv,

Dynamic Repositioning in a Bike-Sharing System *INFORMS annual meeting*, Charlotte, North Carolina, November 2011

#### 20. Michal Tzur, D. Pesach\*, Tal Raviv,

Repositioning in a Bike-Sharing System

The annual ORSIS meeting, Maale Ha'amisha, Israel, June 2012

#### 21. Michal Tzur, D. Pesach\*, Tal Raviv,

Dynamic Repositioning in a Bike-Sharing System VeRoLog Conference (EURO Workgroup on Vehicle Routing and Logistics Optimization), Bologna, Italy, June 2012,

#### 22. Tal Raviv

The Battery Switching Station Scheduling Problem 21<sup>st</sup> International Symposium on Mathematical Programming, Berlin, Germany, August 2012

#### 23. Parking Reservations in Shared Mobility Systems

Mor Kaspi\*, Tal Raviv, and Michal Tzur Joint 2nd Workshop of the Turkish and Israeli Operations Research Societies Tel Aviv, October 2013

# 24. Partial Parking Reservation Policies in One-Way Vehicle Sharing Systems Mor Kaspi\*, Tal Raviv, and Michal Tzur *3<sup>rd</sup> VeRoLog Conference*, Oslo, Norway, June 2014,

#### 25. Tal Raviv, and Tom Cherchy\*

The minimum complete cycle problem *VeRoLog Conference*, Oslo, Norway, June 2014,

# 26. Tal Raviv, and Yuval Elbar\* Optimal scheduling of mixed bus fleet VeRoLog Conference, Vienne, Austria, June 2015,

# 27. Mor Kaspi\*, Tal Raviv, and Michal Tzur Detection and Collection of Broken Bicycles in Bike-Sharing Systems \*VeRoLog Conference\*, Vienne, Austria, June 2015,

# 28. Sharon Datner\*, Tal Raviv, and Michal Tzur Setting Inventory Levels in a Bike Sharing Network *VeRoLog Conference*, Nantes, France, June 2016,

# 29. Yuval Elbar\* and Tal Raviv The Mixed Transit Fleet Bus Scheduling Problem Route2016 workshop, Rambouillet, France

# 30. Avraham Edison\* and Tal Raviv The Stochastic Time-Dependent Orienteering Problem with Soft Time Windows *The annual ORSIS meeting,* Ramat Gan, Israel, May 2017

31. Avraham Edison\*, E. Khmelnitsky and Tal Raviv The decentralized field service routing problem *The POMS international conference*, Israel, June 2017

### 32. Shlomo Beychok, Hillel Bar Gera, Tal Raviv, Gad Rabinowitz Share A Ride to the Train Station Using a Demand-Responsive Feeder Service

- The POMS international conference, Israel, June 2017
- hEART: 6<sup>th</sup> Symposium of the European Association for Research in Transportation, Haifa, Israel, September 2017

### 33. Yifat Douek Pinkovich\*, Tal Raviv, Irad Ben-Gal A Combinatorial Approach for Optimal Sensor Selection *The annual ORSIS meeting*, Ramat Gan, Israel, May 2017

#### 34. Eyal Tenzer\*, Tal Raviv

Small Parcel Routing in a Crowdsourced Physical Internet

- The POMS international conference, Israel, June 2017
- VeRoLog Conference, The Netherlands, Amsterdam, July 2017

#### 35. Edison Avraham\*, Eugene Khmelnitsky, Tal Raviv

The Decentralized Field Service Routing Problem

The POMS international conference, Israel, June 2017

#### 36. Tal Raviv

New methods for small parcel delivery - a survey lecture

- Smart Cities, Potentials, Prospects and Discontent, Israel, Tel Aviv, 2017
- Workshop on smart logistics, a revolution in the making, Tel Aviv, 2017
- 15th *CEMS* Research *Seminar on supply chain management,* Austria, Riezlern, January 2018

#### 37. Yossi Bukchin and Tal Raviv

Constraint Programming for Solving Various Assembly Line Balancing Problems. 15th *CEMS* Research *Seminar on supply chain management,* Austria, Riezlern, January 2018

#### 38. Ido Orenstein\*, Tal Raviv, Elad Sadan\*

Delivery Process with Flexibility Using Automated Parcel Lockers

- ORSIS meeting, Beer Sheva, 2018
- Euro annual meeting, Valencia, 2018

#### 39. Edison Avraham\* and Tal Raviv,

Time-dependent and stochastic field service routing and scheduling International Conference on Industrial Logistics, Beer Sheva, Israel, May, 2018

#### 40. Eyal Tezner\* and Tal Raviv

Crowd-shipping of small parcels in a physical internet Route 2018 workshop, Comwell Borupgaard, Denmark, June 2018

#### 41. Tal Raviv, Ido Orenstein\*

Reliable Parcel Routing in a Physical Internet

- 16th CEMS Research Seminar on supply chain management, Riezlern, January, Austria, 2019
- INFORMS TSL Society Workshop, Vienna, Austria, July 2019

#### 42. Tal Raviv, Yossi Bukchin

Optimal retrieval in puzzle-based storage systems with simultaneous load and block movement

17th CEMS Research Seminar on supply chain management, Riezlern, Austria, January 2020

## 43. Tal Raviv, Yossi Bukchin, Rene de Koster

Optimal Retrieval from a Puzzle Based Storage System using Automated Mobile Robots

- 18th CEMS Research Seminar on supply chain management, online event, January 2021
- ORSIS meeting, Jerusalem, June 2022
- ROUTE 2022, meeting, Comwell Borupgaard, Denmark, June 2022
- Jon-Shmuel Halfway to Twelfty, Marne-la-Vallée, France, July 2023

#### 44. Tal Raviv

The service points' location and capacity problem 20th *CEMS* Research *Seminar on supply chain management,* Riezlern, Austria, January 2022

#### **Other Publications**

1. Tal Raviv and Michal Tzur

Introduction to the special issue on shared mobility systems *EURO Journal of Transportation and Logistics* (2016), **5**:3, 257-259 Citations: 3/5 (ISI/Google Scholar)

2. Antoine Deza, Frédéric Meunier, and Tal Raviv

Preface: Optimization and Discrete Geometry. *Discrete Optimization* (2021), article in press

3. Mor Kaspi, Tal Raviv, Marlin Ulmer

Preface to the special issue of the future of city logistics.

Networks, (2022), article in press