

Curriculum Vitae

Name: Yuval Cohen

Date: 03/10/2025

Academic & Professional Activities & Achievements1-31

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1. Personal Details

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<https://orcid.org/0000-0002-8225-6960>

2. Higher Education

a. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree	Year of Approval of Degree
1992-97	University of Pittsburgh (USA)	Ph.D. Industrial Engineering	1998
1990-92	Technion (Haifa)	M.Sc. Industrial Engineering	1992
1985-89	Ben-Gurion University (Be'er-sheva)	B.Sc. Industrial Engineering	1989

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	Name of Institution and Department	Rank/Position
2024	Afeka Academic College of Engineering	Tenure
2019-Current	Afeka Academic College of Engineering	Associate Professor (Industrial Engineering)
2014-2019	Afeka Academic College of Engineering	Senior Lecturer (Industrial Engineering)
2008-2014	Open University (IL)	Senior Lecturer (Industrial Engineering)
2002-2008	Open University (IL)	Lecturer (Industrial Engineering)

4. Offices in Academic Administration

“**” Since last promotion; “***” Since tenure acceptance

Dates	Name of Institution and Department	Office/Position
**2025	Afeka Academic College of Engineering Industrial Engineering	Head of M.Sc. Thesis program in Engineering Management
*2022-Current	Afeka Academic College of Engineering	Member of the Afeka Appointments Committee
*2019 – Current	Journal of Intelligent Manufacturing (JIMS), ISSN: 0956-5515 (Print) 1572-8145 (Online). (H:85 , Impact factor: 7, Q1)	Associate Editor,
2019 – Current	International Federation of Automatic Control (IFAC). TC 5.1: Plant Control and Industrial Logistics	Vice chair of IFAC TC-5.1 committee (Plant Control and Industrial Logistics)
2014-Current	Afeka Academic College of Engineering Industrial Engineering	Member of the Industrial Engineering teaching and curriculum committee
2014-Current	Afeka Academic College of Engineering Industrial Engineering	Head: Operations management discipline in Industrial Engineering
2022	Int. Fed. Automatic Control (IFAC)	Chair of the IMS-2022 Workshop (IFAC workshop on Intelligent Manufacturing)
2002-2014	Open University (IL)	Head: Industrial Engineering B.Sc. program. (Established this program)

“***”used below to mark contributions since job tenure acceptance (2024)

“**”used below to mark contributions since last appointment as Associate Professor

5. Scholarly Positions and Activities outside the Institution

5.1 Editorship

- *2019 - Current: **Associate Editor**, Journal of Intelligent Manufacturing (JIMS), ISSN: 0956-5515 (Print) 1572-8145 (Online). (**H:85 , Impact factor: 7, Q1**)
<https://link.springer.com/journal/10845/editorial-board>.
- *2025: Editor of the Proceedings 15th IFAC Workshop on Intelligent Manufacturing Systems IMS 2025, Koszalin, Poland, IFAC PapersOnline — ISSN 2405-8963
- *2025: Applied Sciences, **Guest-Editor** of a Special Issue "Forging the Future of Resilient and Intelligent Manufacturing and Production".
https://www.mdpi.com/journal/applsci/special_issues/LV8X93LF4B
- *2024: Sustainability, **Guest-Editor** of a Special Issue: Smart Sustainable Techniques and Technologies for Industry 5.0
https://www.mdpi.com/journal/sustainability/special_issues/788A32O340
- *2023: Journal of Intelligent Manufacturing (JIMS), **Guest-Editor** of a Special Issue: "Intelligent Cobot Systems: Human-Cobot Collaboration in Manufacturing"
https://www.mdpi.com/journal/electronics/special_issues/human_robot_collab
- *2023: Applied Sciences, **Guest-Editor** of a Special Issue "Advances in Smart Production & Logistics".
https://www.mdpi.com/journal/applsci/special_issues/Smart_Production_Logistics
- *2022: IFAC Papersonline. Special issue **Editor**: "14th IFAC Workshop on Intelligent Manufacturing Systems IMS 2022: Tel-Aviv, Israel, 28-30 March 2022",
<https://www.sciencedirect.com/journal/ifac-papersonline/vol/55/issue/2>
- *2022: Applied Sciences, **Guest-Editor** of a Special Issue "Smart Services: Artificial Intelligence in Service Systems".
https://www.mdpi.com/journal/applsci/special_issues/AI_Ser
- *2019-2021: Journal of Intelligent Manufacturing (JIMS), Guest-Editor of a Special Issue: Intelligent Manufacturing Systems in Industry 4.0.
<https://link.springer.com/article/10.1007/s10845-021-01769-0>
- *2019: International Journal of Advanced Manufacturing Technology (IJAMT), **Guest-Editor** of a Special Issue: Design and management of digital manufacturing and assembly systems in the Industry 4.0 era.
<https://link.springer.com/article/10.1007/s00170-019-04595-0>
- *Current: International Advisory Board - International Journal of Operations Research and Information Systems (IJORIS)
- *Current: International Advisory Board - International Journal of Productivity Management and Assessment Technologies (IJPMAT)
- *Current: International Advisory Board - International Journal of ICT Research in Africa and the Middle East (IJICTRAME)
- *Current: Editorial Review Board - International Journal of Artificial Intelligence (AI) in Business and Management (IJAIBM)
- *Current: Editorial Review Board - International Journal of Strategic Decision Sciences (IJSDS)
- 2018: Proceedings Editor**: Sinuany-Stern, Z., & **Cohen, Y.** (2018). ICIL 2018 : 14th International Conference on Industrial Logistics, 15-17 May, Beer Sheva, Israel : conference proceedings. Ben-Gurion University (ISBN: 978-965-572-573-5)

2017: **Book Editor:** Handbook of Research on Strategic Alliances and Value Co-Creation in the Service Industry, Harrisburg: PA, IGI Global. (in English, ISBN-13: 978-1522520849).

2015 - Assembly Automation (AA): **Guest-Editor** of a Special Issue: Volume 35, Issue 1: Special Issue on: Parts-feeding systems for assembly: micro and macro logistics. Emerald Publishing Company.

5.2 Research and Development Positions and Activities

*2019 – Current: **Vice chair of IFAC TC-5.1 committee** (Plant Control and Industrial Logistics) of the International Federation of Automatic Control (IFAC).

<https://tc.ifac-control.org/5/1/members>

*2025: Advisory Board Member & Editor of the Proceedings: 15th IFAC Workshop on Intelligent Manufacturing Systems IMS 2025, Koszalin, Poland, IFAC PapersOnline — ISSN 2405-8963

*2022 – Chair and editor of 14th IFAC Workshop on Intelligent Manufacturing Systems (IMS 2022), Online (originally planned for Tel-Aviv, Israel), 29-30, March 2022.

*2021 – Session chair and proceedings Associate editor – INCOM 2021: 17th IFAC Symposium on Information Control Problems in Manufacturing, Budapest, Hungary.

*2021 – Organizing committee member – ICIL 2021: 5th International Conference on Industrial Logistics, Zakopane, Poland

2018 - (Afeka: December 20) Initiating and organizing a conference on Quality Management (at Afeka Tel-Aviv academic college of engineering)

2018 – Organizing committee member and Chair's special assistant of the International Conference on Industrial Logistics ICIL-2018 at Ben-Gurion University.

6. Participation in Scholarly Conferences

“**” used below to mark contributions since job tenure acceptance (2024)

“*” used below to mark contributions since last appointment as Associate Professor

a. Active Participation

a.1. International Conferences

Date	Name of Conference	Place	Subject of Lecture/Discussion	Role
1** 11/09/2025	15th IFAC Workshop on Intelligent Manufacturing Systems	Koszalin, Poland	1. Generative Assembly Line Design: Optimizing Task assignment, Equipment Selection and Balancing 2. Exploring the Skills Revolution: Strategic Upskilling and Reskilling Human Operators for Advanced Manufacturing Ecosystems 3. Session chair: Advances Toward Smart Digitized Shopfloors	Co-author Speaker Co-author Speaker Organizing Committee member Session chair
2** 30/06/2025	11th IFAC Conference on Manufacturing Modelling, Management and Control – IFAC MIM2025	Trondheim, Norway	A New Digital Twins Technique for Minimizing Setup Times in Reconfigurable Stations of a Mixed Model Flow Lines	Co-author
3** 26/08/2024	18th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2021).	Vienna, Austria	1. Generative Shopfloor Layout Design: challenges and Proposed Modelling Approach 2. Digital, Technological and AI Skills for Smart	Co-author Speaker Co-author Speaker



			Production Work Environment	
4* 26/06/2024	30th IJCIEOM – International Joint Conference on Industrial Engineering and Operations Management	Federal University of Bahia – Salvador, Brazil	Greening the European Defense Industry: Practical Insights from the EU's Defense Technological and Industrial Base (EDTIB)	Co-author
5* 25/09/2023	1st Workshop in Low-Cost Digital Solutions for Automation 2023	Cambridge, UK	Member of the technical programme committee.	25/09/2023
6* 10/07/2023	IFAC World Congress 2023	Yokohama, Japan	A Framework for Integrating Artificial Intelligence in Digital Twins of Manufacturing Systems	Co-author Session chair
7* 10/07/2023	IFAC World Congress 2023	Yokohama, Japan	Multi-Objective Multi-Resource Task Allocation for Collaborative Robots Systems	Co-author
8* 08/06/2023	MECHFORUM 2023	Osaka Japan	On Digital Twins and Smart contracts in Assembly Lines of Complex Products	Invited Speaker
9* 17/07/2022	28th Interna. Joint Conference on Industrial Engineering and Operations Management	Mexico-city, Mexico	Optimizing Empty Containers Repositioning Problem by Using NFT technology and block chain smart contract	Co-author
10* 29/03/2022	14th IFAC workshop on Intelligent Manufacturing Systems	Online (due to COVID-19)	The “New Fit”: Skills and Competencies for The Future of Work	Co-author Session chair Conf. Chair
11* 09/06/2021	The 34th Conference of the European Chapter on	Madrid, Spain	An improved penalty heuristic for the generalized assignment and the TSP	Co-author



	Combinatorial Optimization – ECCO			
12* 07/06/2021	17th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2021).	Budapest/ Hibrid, Hungary	(1) Framework for Block-Chain Deployment in Assembly of an Air-Craft or a Space-Craft (2) Digitization of Assembly Line for Complex Products – The Digital Nursery of Workpiece Digital Twins (3) Absenteeism and Turnover as Motivation Factors for Segmenting Assembly Lines	Speaker Session chair
13* 9/11/2020	13th annual International Conference of Education, Research and Innovation, ICERI2020	Seville, Spain	Exploring the importance of E-Professionalism competence in the education and training of new professionals	Speaker
14* October 2020	40 th Brazilian National Meeting of Production Engineering (ENEGEP 2020)	Sao Paulo, Brazil	Supply-chains in pandemic crisis: challenges and lessons learned	Keynote speaker
15* July 2020	21 st IFAC World Congress	Berlin, Germany	New Cobot Deployment Strategy in Manual Assembly Stations: Countering the Impact of Absenteeism	Speaker Session chair
16* February 2020	International Conference on Exploring Service Science IESS 2020	Porto, Portugal	Empirical Analysis of Call Center Load & Service Level for Shift Planning	Speaker



17* August 27-30, 2019	9th IFAC Conf. Manufacturing Modelling, Management and Control MIM 2019	Berlin, Germany	(1) Hierarchy of Smart Awareness in Assembly 4.0 Systems, (2) Exploring Opportunities for Artificial Emotional Intelligence in Service Production Systems	1.Speaker 2.Coauthor Session chair
18* July 15-17, 2019	25th IJCIEOM – Intern. Joint Conf. on Industrial Engineering and Operations Management,	Novi Sad, Serbia	(1) Frontline Employees Preferences for Interfacing Service 4.0 Artificial Emotional Intelligence Computerized Agent. (2) Enabling Digital Technologies for Service 4.0: A Literature Review Leading to Operator Assistance Framework (3) The impact of task time randomness on optimizing a multi-release planning, and assembly line balancing,	1.Speaker 2.Coauthor 3.Speaker Session chair
19 June 2018	31st European Conference on Combinatorial Optimization ECCO XXXI – Conference	Fribourg, Switzerland	When to Stop? A New Stop Criterion for Combinatorial Optimization Search Techniques	Speaker
20 June 2018	16th IFAC Symposium on Info. Control	Bergamo, Italy	(1) Workstation–Operator	1.Speaker 2.Speaker



	Problems in Manufacturing (INCOM-2018)		Interaction in 4.0 Era: WOI 4.0 (2) Workstation–Operator Interaction in 4.0 Era: WOI 4.0	Session chair
21 May 15-17, 2018	14 th International. Conf. on Industrial Logistics (ICIL 2018)	Beer-Sheva, Israel	(1) Retailer's Optimal Purchase Mix of Bundles and Separate Products in a Supply-Chain of Single Period Items, 14 th , (2) Scheduling on-going research and development projects (3) Optimal road project portfolio selection under limited local authorities' budgets in polynomial time	1.Speaker 2.Speaker 3.Speaker Session chair. Conf. Organizer Proceedings editor
22 March 26-28, 2018	17th Annual Security Conference Securing the Interconnected world	Las Vegas, USA	Adding Network Exposure to Environmental Measures in Security Risk Scoring Models, ,	Coauthor
23 July 2017	20 th IFAC World Congress	Toulouse, France	Assembly system configuration through Industry 4.0 principles: the expected change in the actual paradigms	Speaker Session chair
24 July 2017	The Intern. Joint Conference on Industrial Engineering & Operations Management IJCIEOM 2017	Valencia, Spain	When to Stop? A New Stop Criterion for Combinatorial Optimization Search Techniques	Speaker Session chair

25	International Conference on Production and Operations Management Society (POMS),	Tel-Aviv, Israel	Framework for Personal Rapid Transit Feasibility studies,	Speaker
June 27 – 29, 2017.				
26	Annual Conference of the Institute of Industrial and Systems Engineering (IISE).	Pittsburgh, PA, USA	(1) Formulating Polynomial Time Solutions to Certain Combinatorial Problems (2) Common Service Demand Pattern for Service Capacity Planning	1.Speaker 2.Speaker
May 2017				
27	International Conference on Exploring Service Science (IESS 2017)	Rome, Italy	Customer Satisfaction from Inner-City Services: a Case Study.	Speaker
May 2017				
28	22nd Intern. Conference on Industrial & Systems Engineering (International IISE XXII)	San-Sebastian, Spain	Common service demand pattern for service capacity planning	Speaker
July 2016				
29	International Conference on Exploring Service Science, IESS 2016	Bucharest, Romania	Modelling a manager's work as a service activity	Speaker
May 2016				
30	XXI, Intern. Conference on Industrial Engineering IIE	Aveiro, Portugal.	(1) Integrating Strategic Considerations and Value Co-Creation in Project Management (2) Managing Continuing	1.Speaker 2.Speaker
July 6-8, 2015				

			Projects: Optimizing the Version-Release Policy	
31 May 2015	Conference on Digital Forensics, Security and Law	Daytona Beach, Florida USA	Continuous Monitoring System Based on Systems' Environment	Coauthor
32 May 2015	<i>24th Industrial & Systems Engineering Research Conference (ISERC);</i>	Nashville, USA	(1) Scheduling Continuous Projects with Version Releases (2) Dynamic Strategic Planning in Project Management: Optimizing Project's Value	1. 2. Speaker Speaker Session chair
33 February 4-6 2015	<i>Exploring Services Science, 6th International Conference, IESS 2015</i>	Porto, Portugal	Service Oriented Acquisition Models for Serving Products with Short Expiration Period	Speaker

Continued list (condensed format for saving space):

Condensed format list of active participation in international conferences:

2003-2015 – each conference counted once (condensed format)

34. **Cohen Y.**, Etgar R., Gelbard R., Optimizing Planning and Scheduling Product/Software Releases using MPSO, *Proceedings of the 23th Industrial Engineering Research Conference (ISERC); Montreal, Canada; May 2014.*
 - Meltser A. **Cohen Y.**, Avigal M., Conclusions from Comparing Genetic Algorithms for U-shaped Assembly Line Balancing, *Proceedings of the 23th Industrial Engineering Research Conference (ISERC); Montreal, Canada; May 2014.*
35. **Cohen Y.**, Faccio M., Absenteeism/Turnover Analysis in Mixed-Model Assembly Lines, *Proceedings of the 22nd International Conference on Production Research (ICPR 22), Iguassu Falls, Brazil, July 2013.*
 - **Cohen Y.**, Bukchin Y., Optimizing Work-Sharing Assignments for Replacements of Absentees in Assembly Lines, *Proceedings of the 22nd International Conference on Production Research (ICPR 22), Iguassu Falls, Brazil, July 2013.*

- **Cohen Y.**, Span of Control in Long Assembly Lines – Segmenting the Line, *Proceedings of the 22nd International Conference on Production Research (ICPR 22)*, **Iguassu Falls, Brazil, July 2013.**
- 36. **Cohen Y.**, On Capacity Planning for Multi-Stage Multi Model Production Lines with Parallel Machines, *Proceedings of the IAFC Conference on Manufacturing Modeling and Control (MIM)*, **Saint Petersburg, Russia, June, 2013.**
- 37. **Cohen Y.**, Record breaking statistics: implications for optimization search-techniques and risk management, International Workshop on Applied Probability (IWAP-2012), **Jerusalem, Israel, June, 2012.**
- 38. **Cohen Y.**, and Delorme X., Column Generation Approach for Planning the Operation of Reconfigurable Production Line Segments with Bidirectional Conveyance System, 14th IFAC Symposium on Information Control Problems in Manufacturing (INCOM-2012), **Bucharest, Romania, May, 2012.**
- 39. **Cohen Y.**, Singer G., Golan M., Goren-Bar D., Automating the Transformation From a Prototype to a Method of Assembly, *Proceeding of the International Conference on Industrial Electronics, Technology and Automation (IETA 11)*, in IEEE's: *Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE)*; **Bridgeport, Connecticut, USA, December 2011.**
- 40. **Cohen Y.**, A route card modeling technique for complex assembly, *21st International Conference on Production Research (ICPR 21)*, **Stuttgart, Germany, July 2011.**
- 41. **Cohen Y.**, Zwikael O., Sadeh A.; Optimal Project Subsets Selection in Polynomial Time, *Proceedings of the 20th Industrial Engineering Research Conference (IERC)*; **Reno, NV, USA; May 2011.**
- **Cohen Y.**; Assembly line design with shared machines, *Proceedings of the 20th Industrial Engineering Research Conference (IERC)*; **Reno, NV, USA; May 2011.**
- 42. **Cohen Y.** Goren-Bar D., New Automated Assembly Model Based On Automated Route Card Scheme, *Proceeding of the International Conference on Industrial Electronics, Technology and Automation (IETA 10)*, in IEEE's: *Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE)*; **Bridgeport, Connecticut, USA, December 2010.**
- 43. **Cohen Y.**; The Impact of Absenteeism and Turnover in Assembly Lines and Strategies for Overcoming Them, *Proceedings of the Manufacturing and Service Operations Management Conference (MSOM 2010)*, **Haifa, Israel; June 2010.**
- 44. **Cohen Y.**; A New Technique for Solving the Assembly Line Design Problem, *Proceedings of the 19th Industrial Engineering Research Conference (IERC)*; **Cancun, Mexico; May 2010.**

- **Cohen Y.**; Optimizing Purchase Mix of Bundles and Separate Products in the Supply-Chain, *Proceedings of the 19th Industrial Engineering Research Conference (IERC)*; **Cancun, Mexico; May 2010.**
 - **Cohen Y.**; Planning for Assembly Lines Absenteeism and Turnover, *Proceedings of the 19th Industrial Engineering Research Conference (IERC)*; **Cancun, Mexico; May 2010.**
45. **Cohen Y.**, Keren B., New modeling framework for project risk analysis with stochastic risks, *Proceedings of the International Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Research (SMRLO)*, **Beer-Sheva, Israel, February 2010.**
- Gurevich G., ., Keren B., **Cohen Y.**, The impact of bundling perishable products on retailer and producer total profit, *Proceedings of the International Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Research (SMRLO)*, **Beer-Sheva, Israel, February 2010.**
46. Sadeh A., **Cohen Y.**, Zwikael O., Using Sliding Frame Approach for Scheduling Large and Complex Projects, *The IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*, **Singapore, December 2009.**
47. **Cohen Y.** Wang M., Bidanda B., Transition Network for Automation Modeling: A Case Study, *Proceeding of the International Conference on Industrial Electronics, Technology and Automation (IETA 09)*, in IEEE's: *Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE)*; **Bridgeport, Connecticut, USA, December 2009.**
48. **Cohen Y.** Darel E.; Manual Assembly of Lots: Learning as a Drive for a Single Line Configuration, *International Conference of Production Research (ICPR-20)*, **Shanghai, China, August 2009.**
49. Keren B., **Cohen Y.**, Hadad Y., Trade-off optimization in project management: time, budget, and quality, *Proceedings of 23rd European Conference On Operational Research Conference (EURO)*, **Bonn, Germany, June 2009.**
- Gurevich G., Keren B., **Cohen Y.**, Hadad Y., Optimal Bundling for single-period inventory problem, *Proceedings of 23rd European Conference On Operational Research Conference (EURO)*, **Bonn, Germany, June 2009.**
50. **Cohen Y.**, Benson D., Keren B.; New Operations Planning Heuristic for LTL and Package Delivery Systems, *Proceedings of the 18th Industrial Engineering Research Conference (IERC)*; **Miami, USA; May 2009.**
- **Cohen Y.**, Sarin S., A New Technique for Solving the Assembly Line Design Problem, *Proceedings of the 18th Industrial Engineering Research Conference (IERC)*; **Vancouver, Miami, USA; May 2009.**

51. **Cohen Y.**, Automatic Translation of a Process Level Petri-Net to a Ladder Diagram, *Proceeding of the International Conference on Industrial Electronics, Technology and Automation (IETA 08)*, in IEEE's: *Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE)*; **Bridgeport, Connecticut, USA, December 2008.**
52. **Cohen Y**, Dar-El E.; Applying a sliding frame approach for solving a new assembly line design problem, *Proceedings of the 17th Industrial Engineering Research Conference (IERC)*; **Vancouver, Canada; May 2008.**
 - **Cohen Y.**, Zwikael O., and Sadeh A.; Sliding-frame: a new promising approach in project scheduling, *Proceedings of the 17th Industrial Engineering Research Conference (IERC)*; **Vancouver, Canada; May 2008.**
53. Sadeh A, **Cohen Y.**, and O Zwikael; A Heuristic Efficient Solution for Non-Delay Resource Constrained Project Schedule. In: Funda Sivrikaya and Serifoglu Umit Bilge (editors), *Proceedings of the Eleventh International Workshop on Project Management and Scheduling (PMS)*; **Istanbul Turkey; April 2008, 236- 239.**
54. **Cohen Y.**, Keren B.; A simple heuristic for assigning doors to trailers in cross-docks, *Proceedings of the International Conference on Industrial Logistics (ICIL)*; **Tel-Aviv, Israel; March 2008.**
55. **Cohen Y.**, Wang M. E., and Bidanda B.; A modeling technique for execution and simulation of discrete automation, *Proceeding of the International Conference on Industrial Electronics, Technology and Automation (IETA 07)*, in IEEE's: *Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE)*; **Bridgeport, Connecticut, USA, December 2007.**
56. **Cohen Y.**, Sadeh A., and Zwikael O.; On the time dimension of risks in multi project environment, *Proceedings of the 16th Industrial Engineering Research Conference (IERC)*; **Nashville, TN; May 2007.**
 - **Cohen Y.**, Zwikael O., and Keren B.; Project dynamic scheduling using petri nets and pheromones, *Proceedings of the 16th Industrial Engineering Research Conference (IERC)*; **Nashville, TN; May 2007.**
57. **Cohen Y.**, Wang M. E., and Bidanda B.; Modeling and implementation of agent-based discrete industrial automation, *Proceeding of the International Conference on Industrial Electronics, Technology and Automation (IETA 06)*, in IEEE's: *Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE)*; **Bridgeport, Connecticut, USA, December 2006.**
58. **Cohen Y.**, Sadeh A., and Rokach L.; New rule extraction approach using a modified QM algorithm, *Proceedings of the 15th Industrial Engineering Research Conference (IERC)*; **Orlando, FL; May 2006.**

- **Cohen Y.;** A Polynomial-time optimal inspection policy technique and its implementation, *Proceedings of the 15th Industrial Engineering Research Conference (IERC)*; **Orlando, FL; May 2006.**
- **Cohen Y.,** and Sarin S.; A Comparison of the effect of industrial learning on sequential vs. parallel batch assembly makespan, *Proceedings of the 15th Industrial Engineering Research Conference (IERC)*; **Orlando, FL; May 2006.**
- **Cohen Y.,** Vitner G., and Sarin S.; Learning and buffers effects on work allocation of lots' assembly, *Proceedings of the 15th Industrial Engineering Research Conference (IERC)*; **Orlando, FL; May 2006.**
- 59. **Cohen Y.,** Sadeh A., and Zwikael O.; An efficient technique for finding the shortest non-delay schedule for a resource-constrained project, *Proceedings of the 14th Industrial Engineering Research Conference (IERC)*; **Atlanta, GA; May 2005.**
- **Cohen Y.,** Vitner G., and Sarin S.; Work allocation to stations with various learning slopes in assembly lines for lots, *Proceedings of the 14th Industrial Engineering Research Conference (IERC)*; **Atlanta, GA; May 2005.**
- 60. **Cohen Y.,** Bidanda B., and Rokach L.; A new technique for modeling and implementation of agent-based discrete industrial automation, *Proceedings of the 15th International Conference on Flexible Automation and Manufacturing (FAIM)*; **Bilbao, Spain; July 2005.**
- 61. **Cohen Y.,** Sadeh A., and Zwikael O.; New efficient heuristic for resource constrained project scheduling, *Proceedings of the 18th International Conference of Production Research (ICPR)*; **Salerno, Italy; August 2005.**
- **Cohen Y.,** and Vitner G.; Evaluating productivity by combining characteristics of BSC and QFD, *Proceedings of the 18th International Conference of Production Research (ICPR)*; **Salerno, Italy; August 2005.**
- 62. **Cohen Y.,** Sadeh A., and Zwikael O.; A new approach for generating project activities on arcs network, *Proceedings of the 9th International Workshop on Project Management and Scheduling (PMS)*; **Nancy, France; 2004; pp. 80-83.**
- 63. **Cohen Y.** and Vitner G.; Combining the characteristics of balanced score card and QFD into a new technique for evaluating productivity, *Proceedings of the 14th International Conference on Production and Quality Research (ISPQR)*; **Miami, FL; February 2004.**
- **Cohen Y.,** and Vitner G.; Optimal Work allocation in batch assembly lines, under learning, *Proceedings of the 14th International Conference on Production and Quality Research (ISPQR)*; **Miami, FL; February 2004.**

Information on participation in 9 international conferences prior to 2004

– to be supplied upon request



a.2. Local Conferences

Date	Name of Conference	Place	Subject of Lecture/Discussion	Role
1** 06/05/2025	2025 Annual Conference of Operations Research Society of Israel (ORSIS)	Tel-Aviv University	1. Budgeted Traffic Network Design: A Heuristic Primal Constructive Approach	Speaker & Session Chair
2* 27/05/2024	2024 Annual Conference of Operations Research Society of Israel (ORSIS)	Ben-Gurion University	2. On determining time-interval for monitoring dynamic arrival in responsive queuing systems 3. Sliding Frame Approach for Solving a New Assembly-Line Design Problem	Speaker Speaker
3* 27/04/2023	22 nd National Israeli convention on Industrial Engineering (IEM 2021)	Ariel University	On Digital Twins and Smart contracts in Assembly Lines	Speaker & Session chair
4* 03/08/2021	2021 Annual Conference of Operations Research Society of Israel (ORSIS)	Technion Haifa Israel	An improved penalty heuristic for the assignment problem,	Speaker
5* 01/04/2021	22 nd National Israeli convention on Industrial Engineering (IEM 2021)	Rishon LeZion (Lago) Israel	Framework for Smart Contracts and Block-Chain Technology Deployment in Assembly Systems	Speaker & Session chair
6* 19/02/2020	9 th Israeli Industrial Engineering and Management Research Conference	Technion Haifa Israel	Smart control using adaptive machine learning for processes with closed-loop control in industry 4.0 environment: a novel framework	Speaker
7* 27,11,2019	The 37 convention of the Israel	Tel-Aviv	Causation analysis for improving quality	Speaker



	<i>Society for Quality.</i>	(David Intercont. Hotel)		
8* 20/05/2019	<i>2019 Annual Conference of Operations Research Society of Israel (ORSIS)</i>	<i>Shfaim</i> Israel	(1) Improving Personal Rapid Transportation system by utilizing smart distribution rules. (2) Polynomial Time Optimization of Road Construction Portfolio Selection under Limited Local Authorities Budgets (3) Simulating Elevated Rapid Transit System for Performance Analysis	Speaker
9* 15/04/2019	<i>20th Industrial Engineering and Management Conference (IEM)</i>	Tel-Aviv Israel	Optimizing Termination Criterion For Genetic Algorithms And Other Search Techniques	Speaker & Session chair
10 February 2016	International Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Research (SMRLO)	Beer-Sheva Israel	Determining Manager's Load and Control Span by Modeling Management as a Service Activity	Speaker
11 February 2015	<i>19th Industrial Engineering and Management Conference (IEM)</i>	Tel-Aviv Israel	(1) New approach for managing strategic and mega projects (2) Optimizing cloud costs (3) Determining the SOW of a continuing project releases	Speaker & Session chair
12 March 2014	<i>18th Industrial Engineering and Management Conference (IEM)</i>	Tel-Aviv Israel	(1) Retailer's Optimal Bundling Policy in a Supply-Chain of Single Period Items (2) Comparison of Three Genetic Algorithms for	Speaker & Session chair



			Mixed Model U-shaped Assembly Line Balancing	
13 March 2013	<i>6th Israeli Industrial Engineering Research Meeting (IIERM)</i>	Maale-Hachmisha Israel	(1) Determining the SOW of Product Releases of a continuous Project (2) Assembly Line: Optimizing the Number of Stations per Segment	Speaker
14 March 2012	<i>17th Industrial Engineering and Management Conference (IEM)</i>	Tel-Aviv Israel	(1) IT divide problem pertaining to planning and budgeting activities (2) The combined effect of multiple models sequencing and absenteeism/turnover on the throughput of assembly lines	Speaker & Session chair
15 March 2011	<i>5th Israeli Industrial Engineering Research Meeting (IIERM)</i>	Dead-Sea Resort Israel	New automated assembly model based on automated route card scheme	Speaker
16 February 2010	Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Research (SMRLO)	Beer-Sheva	(1) The impact of bundling perishable products on retailer and producer total profit (2) Managing projects with stochastic risks	Speaker

Continued list (condensed format for saving space):

Condensed format list of active participation in local conferences:

each conference counted once (condensed format)

17. **Cohen Y.;** Load Plan Heuristic for a Network of Hubs and Terminals in Package Delivery Systems, *Proceedings of the ORSIS conference 2009; Herzlia, Israel; May 2009.*

- **Cohen Y.**; Load Plan Heuristic for a Network of Hubs and Terminals in Package Delivery Systems, *Proceedings of the ORSIS conference 2009*; **Herzeliya, Israel; May 2009.**
- 18. **Cohen Y., Dar-El E., Vitner G.**; The sliding frame – extending the concept to various assembly line balancing problems, *Proceedings of the 4th Israeli Industrial Engineering Research Meeting (IIERM)*; **Maalot, Israel; March 2009.**
- Gurevich G, Baruch K, **Cohen Y.**; Optimal bundling policy for the newsvendor problem, *Proceedings of the 4th Israeli Industrial Engineering Research Meeting (IIERM)*; **Maalot, Israel; March 2009.**
- 19. **Cohen Y., Sadeh A., and Raz D.**; From Node Routing to Arc Routing: Utilizing the Chinese Postman problem for Heuristically Solving the TSP, *Proceedings of the ORSIS conference 2008*; **Shfayim, Israel; May 2008.**
- 20. **Cohen Y., Zwikael O., and Sadeh A.**; Using a sliding-frame approach for scheduling large and complex projects, *Proceedings of the 15th Industrial Engineering and Management Conference (IEM)*; **Tel-Aviv, Israel; March 2008.**
- 21. **Cohen Y., and Keren B.**; A new efficient heuristic for cross-dock door assignment problem, *Proceedings of the ORSIS conference 2007*; **Maale-HaChamisha, Israel; May 2007.**
- 22. **Cohen Y., Sadeh A., and Zwikael O.**; Extending a heuristic for resource constrained project scheduling (proceedings distributed in a CD), *Proceedings of the 14th Industrial Engineering and Management Conference (IEM)*; **Tel-Aviv, Israel; March 2006.**
- 23. **Cohen Y., and Sadeh A.**; A new technique for generating AOA network from a list of precedence constraints, *Proceedings of the 13th Industrial Engineering and Management Conference (IEM)*; **Tel-Aviv, Israel; 2004; p. 74e.**
- **Cohen Y., Vitner G., and Dar-El E.**; Optimal work allocation in batch assembly lines, under homogeneous learning, *Proceedings of the 13th Industrial Engineering and Management Conference (IEM)*; **Tel-Aviv, Israel; 2004; p. 96e.**
- 24. Sadeh A., and **Cohen Y.**; Finding winning combinations, *Operations Research Society of Israel Annual Meeting (ORSIS)*; **Ashkelon, Israel, 2003.**
- 25. **Cohen Y.**; Minimization of the makespan in production lines under learning, *Proceedings of the Seventh Conference of Industrial Engineering and Management (IEM)*; **Haifa, Israel; 1992; Section 4.3.2.**

b. Organization of Conferences and Sessions

“*” Since last promotion; “**” Since tenure acceptance

Date	Name of Conference	Place	Subject of Lecture/Discussion	Role
** 23 - 24 October, 2025	Enterprise Integration, Interoperability and Networking	Marbella, Spain	Digital Twin interoperability. Human machine interface	International Program Committee
** 23-24 September 2025	LODISA-25 International workshop	Cambridge, England, United Kingdom	Low-Cost Digital Solutions for Industrial Automation	Technical Program Committee
** 11-12. September, 2025	15th IFAC Workshop on Intelligent Manufacturing Systems	Koszalin, Poland	Generative Assembly Line Design: Optimizing Task assignment, Equipment Selection and Balancing The Digital and AI Skill Management Matrix in STEM : A Multi-Level Framework and Research Agenda	Proceedings editor Special Session Organizer International Program Committee
** 30 Oct. -2 Nov., 2025	11 th ICIL International Conference on Industrial Logistics	Tokyo Japan		Scientific Committee Member
*26-31 August 2024	18th IFAC Symposium on Information Control Problems in Manufacturing (INCOM-2024)	Vienna, Austria	1. Advances Toward Smart Digitized Shopfloors 2. Human Work and Skills Advances Related to Smart Manufacturing	Special Session Organizer Special Session Organizer
*9-14 July 2023	IFAC World Congress 2023	Yokohama, Japan	Advances Toward Smart Digitized Shopfloors	Open Invited Track Organizer
*3-6 July 2023	CoDIT'23 - International	Rome, Italy	Conference organization	Program Committee

	Conference on Control, Decision and Information Technologies			Member
*29-30, March 2022	14th IFAC Workshop on Intelligent Manufacturing Systems (IMS 2022),	Online (COVID-19)	Conference organization	<ul style="list-style-type: none"> • Chair • Editor
*29-30, March 2022	14th IFAC Workshop on Intelligent Manufacturing Systems (IMS 2022),	Online (COVID-19)	Session: Advanced monitoring, prediction and control in industrial processes	Session chair
*10 June 2021	34th Conference of the European Chapter on Combinatorial Optimization (ECCO 2021)	Madrid Spain (hybrid)	Session: TSP and its variants	Session chair
*7 June 2021	17th IFAC Symposium on Information Control Problems in Manufacturing (INCOM-2021)	Budapest Hungary (hybrid)	Session: Assembly 4.0	Session chair & organizer
* July 2020	21st IFAC World Congress	Berlin Germany.	Session: Assembly 4.0	Session chair & organizer
* August 2019	9th IFAC Conference Manufacturing Modelling, Management and Control (MIM 2019)	Berlin Germany.	Session: Modeling design and operations of Industry 4.0 assembly systems: Towards Assembly 4.0	Session chair & organizer
*12-14 August 2019	13th IFAC Workshop on Intelligent Manufacturing Systems (IMS- 2019)	Oshawa Ontario, Canada	Conference organization	Member: organizing committee
*15-17 July	25th IJCIEOM - International	Novi-Sad, Serbia	Session:	Session chair

2019	Joint Conference on Industrial Engineering and Operations Management		Advances in service systems – Session III-B	Member of scientific committee
* May 2019	The 2019 Annual Conference of Operations Research Society of Israel (ORSIS)	Shfaim, Israel	Session: Transportation 1 (smart transportation)	Session chair
* April 2019	The 20th Industrial Engineering and Management Conference (IEM)	Tel-Aviv Israel	Session: Customer relationship management & knowledge management	Session chair
11-13 June 2018	16th IFAC Symposium on Information Control Problems in Manufacturing (INCOM-2018)	Bergamo Italy	Session: Assembly 4.0	Session chair
15-17 May 2018	14th International Conference on Industrial Logistics (ICIL 2018)	Beer-Sheva Israel	Conference organizing committee member: Managed review & program organization	Chair's - main assistant. Organizing committee member
15-17 May 2018	14th International Conference on Industrial Logistics (ICIL 2018)	Beer-Sheva Israel	Session: "Inventory Logistics"	Session chair. Proceedings Editor
July 2017	20th IFAC World Congress	Toulouse: France.	Session: Assembly 4.0	Session chair
July 2017	The International Joint Conference	Valencia Spain	Session: Optimization	Session chair



	ICIEOM- (IJC2017)			Scientific committee member
June, 2015	The 24th Industrial Engineering Research Conference (IERC 2015)	Nashville TN USA	Session: Project Management	Session chair
February 2015	The 19th Industrial Engineering and Management Conference (IEM 2015);	Tel-Aviv Israel	Session: Project Management	Session chair
March 2014	The 18th Industrial Engineering and Management Conference (IEM 2014)	Tel-Aviv, Israel	Session: Project Management.	Session chair
14 July 2013	22nd Intern. Conference on Production Research (ICPR 22)	Iguassu Falls Brazil	Session: Production Systems and Management	Session chair
June, 2013	IAFC Conference on Manufacturing Modeling and Control (MIM 2013)	Saint Petersburg, Russia	Session: Balancing and Sequencing of Assembly and Machining Lines	Session chair
June 2012	The International workshop on Applied Probability (IWAP 2012)	Jerusalem Israel	Session: Extreme Value Statistics	Session chair
May 2012	The 14th IFAC Symposium on Information Control Problems in	Bucharest Romania	Session: Combinatorial design of reconfigurable production lines	Session chair



	Manufacturing (INCOM 2012)			
March 2012	The 17th Industrial Engineering and Management Conference (IEM 2012)	Tel-Aviv, Israel	Session: Assembly Line Design	Session chair
August 2011	International Conference on Production Research (ICPR 21),	Stuttgart, Germany	Session: Design Of Assembly Systems.	Session chair
June, 2010	The 19th Industrial Engineering Research Conference (IERC);	Cancun, Mexico	<u>Session-1</u> : Assembly line design and balancing, <u>Session-2</u> : Planning for Assembly Lines Dynamics	Two Sessions chair and organizer
February 2010	International Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Research (SMRLO 2010)	Beer-Sheva Israel	Session: Risk management	Session chair
August 2009	<i>The 20th International Conference of Production Research (ICPR-20),</i>	Shanghai China	Special session: representing production planning research in dedication of Prof. Dar-El memorial	Session chair
May 2009	<i>The 18th Industrial Engineering Research Conference (IERC);</i>	Vancouver Canada	Session: Production & Mfg. Planning	Session chair

Information on organization of conferences and Sessions prior to 2009 to be supplied upon request.

7. Research Grants

a. Grants Awarded

Role in Research	Co-Researchers	Topic	Funded by/Amount (IS)	Year
1. Principal Investigator *	Shraga Shoval	Human-Cobot interaction	Ariel/Afeka: 50,000	2023
2. Principal Investigator	Erel Avineri	Feasibility Study of an Urban Elevated Transportation System	Transportation Ministry/500,000	2016
3. Principal Investigator	Evgenia Apartsin	Developing a methodology to analyze the population resilience in real time	Ben Gurion University/200,000	2012
4. Principal Investigator	N/A	Decision making under uncertainty	Open University/30,000	2010
5. Principal Investigator	N/A	Project scheduling	Open University/30,000	2007
6. Principal Investigator	N/A	Inventory Acquisition Decisions	Open University/35,000	2005
7. Principal Investigator	N/A	Developing Operating Measures for Municipality of Shoham	Eshkol Local Governance fund/50,000	2004
8. Principal Investigator	N/A	Learning in Inventory Acquisition Decisions	Open University/10,000	2003
9. Principal Investigator	Bopaya Bidanda	TalkMOST system—an intelligent voice-activated work-measurement system	Benjamin Franklin Foundation/ 270,000 (\$60,000)	1995

10. Principal Investigator	N/A	Technology evaluation of two-dimensional bar-code symbologies	American National Standards Institute (ANSI)/225,000 (\$50,000)	1993
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Papers related to grants by serial number

Grant -1: Mittelman G., Avineri A., **Cohen Y.**, Kariv Y. (2022) Techno-economic Analysis of Energy Supply to Personal Rapid Transit (PRT) Systems, *Applied Energy*. In press. <https://doi.org/10.1016/j.apenergy.2021.118006>.

Q1: H-212, Impact 10.5

Grant -1: **Cohen Y.**, Avineri E., Hoffman D., Framework for Personal Rapid Transit Feasibility studies, Production and Operations Management Society International Conference (POMS International conference), Tel-Aviv June 27 – 29, 2017.

Grant -1: Etgar R., **Cohen Y.** (2022) Roadmap Optimization: Multi-Annual Project Portfolio Selection Method. *Mathematics*. 10(9):1601. <https://doi.org/10.3390/math10091601>

Q2: Impact 2.2, Scopus Citescore 2.2.

Grant -3: Shavit T., Benzion U., **Cohen Y.** (2014) Behavioral decision making in the (Q,R) purchasing model: An experimental study, *Managerial and Decision Economics*, 35 (5) 2014, 357–370. Q3, H-55, Impact 1.4 (3 citations)

Grant -3: Benzion U., **Cohen Y.**, Shavit T. (2010) The newsvendor problem with unknown distribution, *Journal of Operational Research Society (JORS)*, 61; 2010; 1022-1031.

Grant -4: **Cohen Y.** and Zwikael O.; Modelling and Scheduling Projects Using Petri Networks; *International Journal of Project Organization and Management (IJPOM)*; 1 (2); 2009; 221-233.

Grant -5: Benzion U., **Cohen Y.**, Peled R., and Shavit T.; Decision-making and the newsvendor problem: an experimental study, *Journal of the Operational Research Society (JORS)*; 59 (9); 2008; 1281-1287.

Grant -6: **Cohen Y.**, and Vitner G.; Evaluating productivity by combining characteristics of BSC and QFD, *Proceedings of the 18th International Conference of Production Research (ICPR)*; Salerno, Italy; August 2005.

Grant -6: **Cohen Y.** and Vitner G.; Combining the characteristics of balanced score card and QFD into a new technique for evaluating productivity, *Proceedings of the 14th International Conference on Production and Quality Research (ISPQR)*; Miami, FL; February 2005.

Grant -7: **Cohen Y.**, Vitner G., and Dar-El E.; Optimal work allocation in batch assembly lines, under homogeneous learning, *Proceedings of the 13th Industrial Engineering and Management Conference (IEM)*; Tel-Aviv, Israel; 2004; p. 96e.

Grant -7: **Cohen Y.**, Vitner G., and Sarin S.; Work allocation to stations with various learning slopes in assembly lines for lots, *Proceedings of the 14th Industrial Engineering Research Conference (IERC)*; Atlanta, GA; May 2005.

Grant -8: **Cohen Y.**, Bidanda B., and Billo E. R.; Accelerating the generation of work-measurement standards through automatic speech recognition: A laboratory study, International Journal of Production Research (IJPR); 36 (10); 1998; 2701-2715.

Grant -9: Billo E. R., Bidanda B., **Cohen Y.**, Fei C., and Petri K.; Performance standards and testing of two-dimensional bar-code systems for overhead scanning, Journal of Manufacturing Systems (JOMS); 15 (5); 1996; 305-315.

b. Submission of Research Pending

c. Submissions of Research Proposals-Not Funded

Role in Research	Co-Researchers	Topic	Funded by	Year	Score
Principal Investigator	Roy Gelbard (BIU)	Determining SOW of Product Release by Cluster Analysis of Project Activities	ISF (proposal ISF-192/13)	2013	N/A 2 Positive reviews (lack of reviewers)
Principal Investigator	Yossi Bukchin (TAU)	Maximizing throughput in lines under absenteeism and turnover: incorporating work-sharing, learning and cross-training	ISF (proposal ISF-127/12)	2012	N/A 3 Positive Reviews (no score)

8. Scholarships, Awards and Prizes

8.1 Grants and Awards

- *2023: Afeka: Excellent researcher award
- *2022: Afeka: Excellent researcher award
- *2021: Afeka: Excellent researcher award
- *2020: Afeka: Excellent researcher award
- *2019: Afeka: Excellent researcher award
- 2018: Afeka: Excellent researcher award
- 2017: Afeka: Excellent lecturer award. Excellent researcher award
- 2016: BOOK OF THE YEAR AWARD by the Institute for Industrial and systems Engineering (IISE). Title: Introduction to Industrial Engineering, Second Edition, CRC Press, (in English, ISBN 9781498706018).
- 2016: Afeka: Excellent lecturer award. Excellent researcher award
- 2015: Afeka: Excellent lecturer award.
- 2014: Afeka: Excellent lecturer award. Afeka: Excellent researcher award
- 2013: Open University (IL): An award for academic faculty outstanding excellence (best faculty criteria score).
- 2012: Open University (IL): An award for academic faculty outstanding excellence (best faculty criteria score).
- 2011: Open University (IL): An award for academic faculty outstanding excellence (best faculty criteria score).
- 2009: Open University (IL): An award for academic faculty outstanding excellence (best faculty criteria score).
- 2008: Open University (IL): An award for academic faculty outstanding excellence (best faculty criteria score).
- 2004-2007: Open University (IL): An award for academic faculty outstanding excellence (best faculty criteria score).

8.2 Full Scholarships

- 1992-1997; University of Pittsburgh, PA, USA. Teaching assistant
- 1990-1992; Technion (IIT), Haifa Israel. Teaching assistant
- 1989; Ben-Gurion University, Be'er-Sheva, Israel. Teaching assistant

8.3 Prizes

2016; Book of the year award by the Institute for Industrial and systems Engineering (IISE). Title: Introduction to Industrial Engineering, Second Edition, CRC Press, (in English, ISBN 9781498706018).

2011; Award for advising the best final project, Afeka Tel-Aviv college of engineering.

2010; Exceptional lecturer award, Afeka Tel-Aviv college of engineering.

2000; FedEx Ground Recognition Award for Outstanding Planning Effort, Pittsburgh.

1988; Israel Transportation Association award for simulation of suggested traffic changes at Ben-Yehuda street in Tel-Aviv, Israel.

1992; Gutwirth graduate award of excellence for exceptional merits at the Technion, Haifa, Israel.

9. Teaching

9.1 Courses Taught in Recent Years

Year	Name of Course	Type of Course (Mandatory)	Degree	Number of Students
*2026	Engineering LLM Agents	Lecture Afeka (Elective)	B.Sc.	20
*2025-2026	Research Methods	Lecture Afeka (Mandatory)	M.Sc.	5
*2023-2026	Industry 4.0 and advanced manufacturing	Lecture (Afeka)	B.Sc.	20
*2023-2026	Supply-chain & Logistic Systems Management	Lecture (Bar-Ilan U.)	B.Sc.	35
*2008-2026	Operations Management 2	Lecture (Afeka)	B.Sc.	150
*2014-2026	Operations Management 1	Lecture (Afeka)	B.Sc.	150
*2014-2026	Layout Design	Lecture (Afeka)	B.Sc.	150
*2014-2026	Advanced topics in operations planning	Lecture (Afeka)	B.Sc.	20
2018-2022	Maintenance & Service Management Systems	Lecture (Bar-Ilan U.)	M.Sc.	25
2014-2020	Service Operations Management	Lecture (Afeka)	M.Sc.	20

2008-2014	Risk management	Lecture (Afeka)	B.Sc.	120
2005-2012	Quality and productivity management	Lecture (Open University)	B.Sc.	30
2007-2008	Research seminar	Seminar (HIT)	M.Sc.	25
2007-2008	Simulation	Lecture (HIT)	B.Sc.	40
2005-2007	Logistics	Lecture (HIT)	B.Sc.	40
2004-2006	Quality Management	Lecture (HIT)	B.Sc.	40

9.2 Supervision of Graduate Students

Name of Student	Title of Thesis	Degree	Years	Institution
*Amir Biton	The feeling of comfort and safety during an interaction between a cobot and a user	Ph.D. Dissertation main supervisor	2024-current	Ariel University
*Tal Ben-Zeev	Optimizing empty container routing using smart contracts	M.Sc. Thesis *Supervised the first year only	2021-2022 *Supervised first year only of 2 years	Bar-Ilan University, Management & Logistics
Ran Etgar	Version Release Optimization	Ph.D. Dissertaion main supervisor	2013-2018	Bar-Ilan University, Business Administration
Dov Hofman	Smart mobility: Private Rapid Transit in Tel-Aviv Metropolitan area.	M.Sc. Final project supervisor	2016	Afeka College of Engineering, Infrastructure Engineering and Management
Elad Peleg	Home Care improvement	M.Sc. Final project	2016	Afeka College of Engineering, Service



	by reorganization	supervisor		Engineering and Management
Sapir Farid	Load Analysis for Staffing Decisions in Call Centers	M.Sc. Final project supervisor	2015-2016	Afeka College of Engineering, Service Engineering and Management
Sasha Meltser	Genetic Algorithms comparisons for Mixed Model U-Line Balancing	M.Sc. Final project supervisor	2012-2013	The Open University of Israel, Computer Science
Marina Embon	Using the Chinese Postman technique for solving the Traveling Salesman Problem (TSP)	M.Sc. Final project supervisor	2012	Holon Institute of Technology, Technology Management
Miri Kedmi	Comparison of alternative CRM systems for "YES" corp.	M.Sc. Final project supervisor	2010	Holon Institute of Technology, Technology Management
Alon Avgill,	Dynamic algorithm for quality control of GreenRoad control devices	M.Sc. Final project supervisor	2009	Holon Institute of Technology, Technology Management

10. Miscellaneous

10.1 Organizing one-day local conferences

2018 - Initiating and organizing a conference on Project Management (at Afeka academic college of engineering).

2015-2017, Initiating and organizing an annual conference on Quality Management (at Afeka academic college of engineering).

2010-2013; Initiating and organizing an annual conference on Quality Management (at the Open University).

2005, 2006, 2007; Initiating and organizing a conference on Logistics Management (at the Open University).

2003, 2004, 2006; Initiating and organizing a conference on Quality Management (at Holon Institute of Technology).

2007; Initiating and organizing a conference on Entrepreneurship and Entrepreneurial "Greenhouses" (at Holon Institute of Technology).

10.2 Organizing “Advanced Manufacturing Technologies” Course for Industrial Managers

2021, 2022, 2023, 2024 - Initiating and organizing a full course (8 weekly meetings) on “Advanced Manufacturing Technologies” (at Afeka academic college of engineering).

11 Professional Experience

1989; *Ben-Gurion University*; Teaching Assistant (Industrial Engineering).

1989; *Zigelman Institute*; Consultant.

1990-1992; *Technion (IIT)*; Teaching Assistant (Industrial Engineering).

1992-1997; *University of Pittsburgh*; Teaching/Research Assistant (Industrial Engineering).

1997 - 1998; *TEFEN-USA*, Industrial Engineer.

1998 - 2001; *FedEx Ground*; Senior Operations Planning Analyst,
Responsible for the rolling five-year plan (\$ 5,000,000,000): hub capacity, hubs and facilities expansions, relocations, and new locations, plus hub load-plans (5 million avg. daily packages), and load-factor control (of 5,000 trailers).

Part 1

PUBLICATIONS

A. Ph.D. Dissertation

Title of Dissertation: A new discrete control modeling technique for automated industrial systems

Date: April 25, 1998

Number of pages: 152

Language: English

University: University of Pittsburgh

Supervisor: Prof. Bopaya Bidanda

Available on Proquest:

<https://search.proquest.com/openview/21eac43ec23c78b5a511d7e5f316f73c/1?pq-origsite=gscholar&cbl=18750&diss=y>

B. Scientific Books (Refereed)

**** Contract with Yuval Cohen for 3rd edition of “Introduction to Industrial Engineering” signed on July 2025 with “Taylor & Fancis – CRC_press” – expected by the end of 2027.**

1. Sinuany-Stern, Z., & **Cohen, Y.** (2018). ICIL 2018: 14th International Conference on Industrial Logistics, 15-17 May, Beer Sheva, Israel: **conference proceedings**. Ben-Gurion University. (in English, ISBN 978-965-572-573-5)
2. Shtub A., **Cohen Y.**, (2016) Introduction to Industrial Engineering, Second Edition, **CRC Press**, (in English, ISBN 9781498706018). 436 Pages.
BOOK OF THE YEAR AWARD by the Institute for Industrial and systems Engineering (IISE).
3. Shtub A., **Cohen Y.**, (2014) Project Management for Industrial Engineering Students (revised edition), The Open University of Israel, (in Hebrew, 152 pages).
4. Shtub A., **Cohen Y.**, (2014) Introduction to Industrial Engineering, (First Edition), The Open University of Israel, (in Hebrew, two volumes: vol. 1: 435 pages, vol. 2: 523 pages).
5. **Cohen Y.** (2012) Probability and Stochastic Models in Operations Research, The Open University of Israel, ISBN: 978-965-06-1365-5 (in Hebrew: 474 pages).

6. Shtub A., **Cohen Y.**, Keren B., (2008) Project Management for Industrial Engineering Students, The Open University of Israel, ISBN: 978-965-06-0963-4 (in Hebrew: 612 pages).

Scientific Review Procedure

All these books were refereed by four professors from: the Technion, Tel-Aviv University, and Ben-Gurion University – having their approval (referral process documentation kept by the development department of the open university)

C. Other Authored Books:

Book writing contract (2025) with CRC Taylor & Francis for: 3rd edition of Introduction to Industrial Engineering

D. Edited Books and Special Issues-Published

1. Edited books:

- a. Rozenes S., **Cohen Y.**, (editors), (2017) Handbook of Research on Strategic Alliances and Value Co-Creation in the Service Industry, Harrisburg: PA, IGI Global. (in English, ISBN-13: 978-1522520849). <https://www.igi-global.com/gateway/book/171696>
- b. **Book Professional and scientific editor** for the translation to Hebrew of the two volumes of "Production and Operations Analysis". The translation is the basis of two courses in the Open University:
 1. Nahmias S. (2008) Operations Management 1 (in Hebrew), The Open University of Israel, ISBN: 965-06-0712-9;
 2. Nahmias S. (2008) Operations Management 2 (in Hebrew), The Open University of Israel, ISBN: 965-06-0787-0.

2.Special Issues (Guest Editor)

- *2024: Applied Sciences, Guest-Editor of a Special Issue "Advances in Internal Logistics and Material Handling for Smart Manufacturing". https://www.mdpi.com/journal/applsci/special_issues/LV8X93LF4B
- *2024: Sustainability, Guest-Editor of a Special Issue: Smart Sustainable Techniques and Technologies for Industry 5.0. https://www.mdpi.com/journal/sustainability/special_issues/3V6Q75KC83
- *2023: Journal of Intelligent Manufacturing (JIMS), Guest-Editor of a Special Issue: "Intelligent Cobot Systems: Human-Cobot Collaboration in

Manufacturing". <https://link.springer.com/article/10.1007/s10845-023-02142-z>

*2023: Applied Sciences, Guest-Editor of a Special Issue "Advances in Smart Production & Logistics".

*2022: IFAC Papaersonline. Special issue Editor: "14th IFAC Workshop on Intelligent Manufacturing Systems IMS 2022: Tel-Aviv, Israel, 28-30 March 2022", <https://www.sciencedirect.com/journal/ifac-papersonline/vol/55/issue/2>

*2022: Applied Sciences, Guest-Editor of a Special Issue "Smart Services: Artificial Intelligence in Service Systems".
https://www.mdpi.com/journal/applsci/special_issues/AI_Ser

*2022, Applied Sciences, Volume 12, Issue 16, Title: Smart Services: Artificial Intelligence in Service Systems, August 2022.
https://www.mdpi.com/journal/applsci/special_issues/AI_Ser

*2021, Journal of Intelligent Manufacturing, Volume 32, Issue7, Title: Intelligent manufacturing systems towards industry 4.0 era, April 2021.
<https://link.springer.com/journal/10845/volumes-and-issues/32-7>

*2019, The International Journal of Advanced Manufacturing Technology, Volume 105, Issue 9, Title: Design and Management of Digital Manufacturing and Assembly Systems in the Industry 4.0 era, December 2019.
<https://link.springer.com/journal/170/volumes-and-issues/105-9>

2015, Assembly Automation, Volume 35, Issue 1. Parts-feeding systems for assembly: macro and micro logistics, February 2015.
<https://doi.org/10.1108/AA-10-2014-084>

E. Articles and Other Scientific Publications:

E-1. Articles in Refereed Journals

*** used below to mark contributions since job tenure acceptance (2024)

** used below to mark contributions since last appointment as Associate Professor

Published

1. ** **Cohen, Y.**, Biton, A., & Shoval, S. (2025). Fusion of Computer Vision and AI in Collaborative Robotics: A Review and Future Prospects. *Applied Sciences*, 15(14), 7905. <https://doi.org/10.3390/app15147905>, **Q2: Impact 2.8, Scopus Citescore 3.7.**
2. **Aperstein, Y., **Cohen, Y.**, & Apartsin, A. (2025). Generative AI-Based Platform for Deliberate Teaching Practice: A Review and a Suggested Framework. *Education Sciences*, 15(4), 405. <https://doi.org/10.3390/educsci15040405>
Q1: H-68, Impact 3.8,
3. ****Cohen, Y.**, Faccio, M., & Rozenes, S. (2025). Vocal Communication Between Cobots and Humans to Enhance Productivity and Safety: Review and Discussion, *Applied Sciences*, 15, 726. <https://doi.org/10.3390/app15020726>
Q2: Impact 2.8, Scopus Citescore 3.7.
4. **Naor, M., Pinto, G., Davidov, P., **Cohen, Y.**, Izchaki, L., Hadieh, M., Ghaith M. (2024) Vertically-Take-off-and-Landing for Distribution of Parcel to Hospitals: A Case Study about Drones Utilization in Israel Healthcare Arena, Sustainability, In Press. **Q2: H-169, Impact 4.0.**
5. ***Cohen, Y.**, & Rozenes, S. (2023). New Framework for Complex Assembly Digitalization and Traceability Using Bill of Assembly and Smart Contracts. *Applied Sciences*, 13(3), 1884.
Q2: Impact 2.8, Scopus Citescore 3.7.
6. *Faccio, M., **Cohen, Y.**, (2023) Editorial: Intelligent Cobot Systems: Human-Cobot Collaboration in Manufacturing, *Journal of Intelligent Manufacturing*, JIMS-D-23-00591R1, **Q1: H-85, Impact 7**
7. *Cohen, Y., Amorim, M., Reis, J. (2022) Editorial: Smart Services: Artificial Intelligence in Service Systems, *Applied Sciences*, Issue 16: Volume 12.
Q2: Impact 2.8, Scopus Citescore 3.7.
8. *Reis, J., Rosado, D.P., **Cohen, Y.**, Pousa, C., Cavalieri, A. (2022) Green Defense Industries in the European Union: The Case of the Battle Dress Uniform for Circular Economy. *Sustainability* 2022, 14, 13018. <https://doi.org/10.3390/su142013018>
Q2: H-169, Impact 4.0.
9. *Rozenes, S., **Cohen Y.**, (2022) Artificial Intelligence Synergetic Opportunities in Services: Conversational Systems Perspective, *Applied Sciences*, 12,16, 1-18, 8363. <https://www.mdpi.com/2076-3417/12/16/8363/pdf>
Q2: Impact 2.8, Scopus Citescore 3.7.

10. *Etgar R., **Cohen Y.** (2022) Roadmap Optimization: Multi-Annual Project Portfolio Selection Method. *Mathematics*. 10(9):1601.
<https://doi.org/10.3390/math10091601>
Q2: Impact 2.2, Scopus Citescore 2.2.
11. *Etgar R., Avineri E., **Cohen Y.** (2023) Personal Rapid Transit Capacity Evaluation for Inner-City: A Detailed Micro-Simulation Study, *International Journal of Transportation Science and Technology*, 12, 119–135. DOI: <https://doi.org/10.1016/j.ijtst.2021.12.002>
Q1: H-18, Impact 3.5
12. *Mittelman G., Avineri A., **Cohen Y.**, Kariv Y. (2022) Techno-economic Analysis of Energy Supply to Personal Rapid Transit (PRT) Systems, *Applied Energy*. In press. <https://doi.org/10.1016/j.apenergy.2021.118006>.
Q1: H-212, Impact 10.5
<https://www.sciencedirect.com/science/article/pii/S0306261921013076>
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E-2. Articles or Chapters in Scientific Books Published

“***” used below to mark contributions since job tenure acceptance (2024)

“**” used below to mark contributions since last appointment as Associate Professor

1. ** Reis, J., Marques, P.A., Marques, P.C., **Cohen, Y.**, Melão, N. (2025). Greening the European Defense Industry: Practical Insights from the EU's Defense Technological and Industrial Base (EDTIB). In: Gonçalves dos Reis, J.C., Mendonça Freires, F.G., Vieira Junior, M., Garcia Barbastefano, R., Oliveira Sant'Anna, Â.M. (eds) *Industrial Engineering and Operations Management. IJCIEOM 2024. Springer Series in Mathematics & Statistics*, vol 483. Springer, Cham. https://doi.org/10.1007/978-3-031-80785-5_1
2. *Reis J., Amorim M., **Cohen Y.**, Rodrigues M. (2020) Artificial Intelligence in Service Delivery Systems: A Systematic Literature Review. In: Rocha Á., Adeli H., Reis L., Costanzo S., Orovic I., Moreira F. (eds) *Trends and Innovations in Information Systems and Technologies. Advances in Intelligent Systems and Computing*, vol 1159. Springer, Cham, pp 222-233.
3. *Reis J., Amorim M., Melão N., **Cohen Y.**, Rodrigues M. (2020) Digitalization: A Literature Review and Research Agenda. In: Anisic Z., Lalic B., Gracanin D. (eds) *Proceedings on 25th International Joint Conference on Industrial Engineering and Operations Management - IJCIEOM. IJCIEOM 2019. Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Cham*, pp 443-456. https://link.springer.com/chapter/10.1007%2F978-3-030-43616-2_47
4. ***Cohen, Y.**, Gelbard, R., & Amorim, M. (2019). When to Stop? A New Stop Criterion for Combinatorial Optimization Search Techniques. In *Engineering Digital Transformation* (pp. 211-218). Springer, Cham. (https://link.springer.com/chapter/10.1007/978-3-319-96005-0_26)

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5. Weintraub, E., & **Cohen, Y.** (2018). Optimizing Cloud Computing Costs of Services for Consumers. In: *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 1627-1637). IGI Global. (<https://www.igi-global.com/chapter/optimizing-cloud-computing-costs-of-services-for-consumers/217284>)
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F. Refereed Articles in Conference Proceedings

“***” used below to mark contributions since job tenure acceptance (2024)

“**” used below to mark contributions since last appointment as Associate Professor

F.1. Published in Refereed Proceedings Conference Articles

1. ** (H=76) Ben-Gal, H., & **Cohen, Y.** (2025). Exploring the Skills Revolution: Strategic Upskilling and Reskilling Human Operators for Advanced Manufacturing Ecosystems, 15th IFAC Workshop on Intelligent Manufacturing Systems (IMS-2025), Koszalin, Poland.
2. ** (H=76) **Cohen, Y.** (2025). Generative Assembly Line Design: Optimizing Task assignment, Equipment Selection and Balancing , 15th IFAC Workshop on Intelligent Manufacturing Systems (IMS-2025), Koszalin, Poland.
3. ** (H=76) **Cohen Y.** & DeLorme X. (2025) A New Digital Twins Technique for Minimizing Setup Times in Reconfigurable Stations of a Mixed Model Flow Lines, 11th IFAC Conference on Manufacturing Modelling, Management and Control – IFAC (MIM2025), Trondheim, Norway.
4. ** (H=76) **Cohen, Y.,** & Aperstein, Y. (2024). Generative Shopfloor Layout Design: Challenges and Proposed Modelling Approach. *IFAC-PapersOnLine*, 58(19), 748-753.
5. ** (H=76) **Cohen, Y.,** & Ben-Gal, H. (2024). Digital, Technological and AI Skills for Smart Production Work Environment. *IFAC-PapersOnLine*, 58(19), 545-550.
6. * (H=76) Granata I., Faccio M., **Cohen Y.** (2023) Multi-Objective Multi-Resource Task Allocation for Collaborative Robots Systems. *IFAC-PapersOnLine*, 56 (2), pp. 5643-5648. DOI: 10.1016/j.ifacol.2023.10.483, (<https://www.sciencedirect.com/science/article/pii/S2405896323008509>)
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10. *(H=76) **Cohen, Y.,** Pilati, F., & Faccio, M. (2021). Digitization of Assembly Line for Complex Products–The Digital Nursery of Workpiece Digital Twins.

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11. *(H=76) Pilati, F., Faccio, M., & **Cohen, Y.** (2021). Absenteeism and Turnover as Motivation Factors for Segmenting Assembly Lines. *IFAC-PapersOnLine*, 54(1), 613-616.
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 16. *(H=76) **Cohen, Y.**, Faccio, M., & Elaluf, A. (2019). Hierarchy of smart awareness in assembly 4.0 systems. *IFAC-PapersOnLine*, 52 (13), 1508-1512.
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 17. *(H=76) **Cohen, Y.**, Shoval, S., & Faccio, M. (2019). Strategic View on Cobot Deployment in Assembly 4.0 Systems. *IFAC-PapersOnLine*, 52(13), 1519-1524.
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18. *(H=76) Amorim, M., **Cohen, Y.**, Reis, J., & Rodrigues, M. (2019). Exploring Opportunities for Artificial Emotional Intelligence in Service Production Systems. IFAC-PapersOnLine, 52(13), 1145-1149.
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19. *(H=76) **Cohen, Y.**, Faccio, M., & Elaluf, A. (2019). Hierarchy of smart awareness in assembly 4.0 systems. IFAC-PapersOnLine, 52(13), 1508-1512.
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<https://www.sciencedirect.com/science/article/pii/S2405896319313941>
20. *(H=76) **Cohen, Y.**, Shoval, S., & Faccio, M. (2019). Strategic view on cobot deployment in assembly 4.0 systems. IFAC-PapersOnLine, 52(13), 1519-1524.
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21. *(H=76) **Cohen, Y.**, Gelbard, R., & Amorim, M. (2019). When to Stop? A New Stop Criterion for Combinatorial Optimization Search Techniques. In Engineering Digital Transformation (pp. 211-218). Springer, Cham. (ECCO XXXI - CO 2018 Joint Conference, Fribourg, Switzerland. June 2018).
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25. Zagorie, R., Rozenes, S., & **Cohen, Y.** (2017, May). Customer satisfaction from inner-city services: a case study. In International Conference on Exploring Services Science (pp. 409-420) Rome: Italy,. Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-319-56925-3_32
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F.2. Published conference abstracts

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- 2) Ben-Zeev T., Elaluf A., **Cohen Y.** (2022) Optimizing Empty Containers Repositioning Problem by Using NFT technology and block chain smart contract, IJCIEOM – 28th International Joint Conference on Industrial Engineering and Operations Management, Mexico-city, Mexico, July 17-20, 2022.
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- 4) **Cohen Y.**, Amorim M., Reis J., Rodrigues M., Frontline Employees Preferences for Interfacing Service 4.0 Artificial Emotional Intelligence Computerized Agent , 25th IJCIEOM - International Joint Conference on Industrial Engineering and Operations Management, Novi Sad, Serbia, July 15-17, 2019
- 5) **Cohen Y.**, Amorim M., Reis J., Rodrigues M., Enabling Digital Technologies for Service 4.0: A Literature Review Leading to Operator Assistance Framework, 25th IJCIEOM - International Joint Conference on Industrial Engineering and Operations Management, Novi Sad, Serbia, July 15-17, 2019
- 6) **Cohen Y.**, Amorim M., The impact of task time randomness on optimizing a multi-release planning, and assembly line balancing, 25th IJCIEOM - International Joint Conference on Industrial Engineering and Operations Management, (IJC2018), Lisbon: Portugal. July 2018.

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G. Entries in Encyclopedias

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Refereed

H. Other Scientific Publications: N/A

I. Other Publications: N/A

J. Other Publications: N/A

K. Submitted Publications: N/A

L. Summary of my Activities and Future Plans

My research is focused on developing methods, techniques and digital tools for the improvement of industrial systems performance (mainly shopfloors, assembly-lines). Recently these methods and techniques are at the intersection of: Intelligent and advanced Manufacturing, Industry 4.0, Operations management, and Logistics. My major research area in recent years focuses on the domain of Assembly 4.0 and its sub-fields as summarized below.

Assembly 4.0

Assembly 4.0 reflects the development in assembly-systems in the Industry 4.0 era (I was a pioneer in using this term). Since main part of my research is related to Assembly 4.0, and since Assembly 4.0 is multi-faceted discipline, Figure 1 describes my recent research in the Assembly 4.0 field and its sub-categories. I published either journal papers or a conference paper in in each of the areas represented in this figure, as described below.

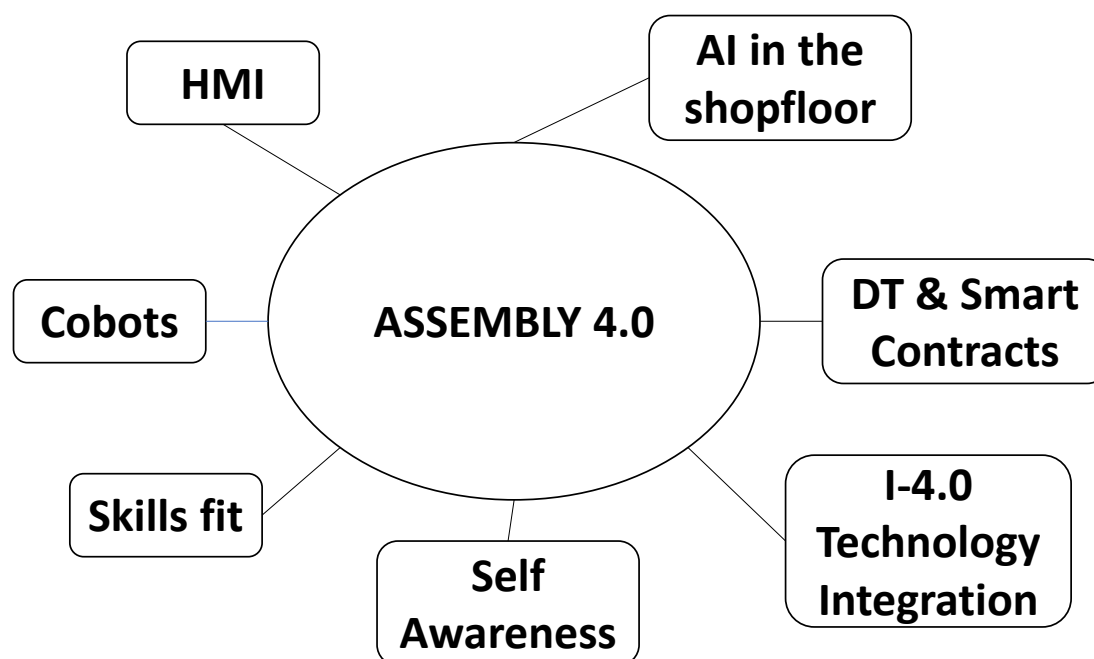


Figure 1. Yuval Cohen's Assembly 4.0 research and its sub-fields

Please see next page - for more detailed description

General Assembly 4.0 (A4) research

In 2017 I presented in a conference my first paper [1] related to Assembly 4.0: explaining the characteristics of Industry 4.0 in assembly lines. Later, in [2] I explain what is new in the design and management of digital manufacturing and assembly systems in the Industry 4.0 era. In [3] I provide a roadmap for understanding Assembly 4.0. As guest editor of [4] I took part in writing the editorial related to intelligent manufacturing in Industry 4.0 settings.

Artificial Intelligence in the shopfloor in Assembly 4.0

Since [4] deals with intelligent manufacturing, it is natural and obvious that the editorial in [4] deals also with artificial intelligence (AI). Machine learning (ML) in Industry 4.0 settings was my first AI related research and my first AI paper [5]. This paper [5] describes a framework for smart control using ML modeling for processes with closed-loop control. In a related paper [6], I extended [5] to recurrent ML, and other AI techniques (such as Case-Based Reasoning (CBR)). In addition [7] deals with other facets of artificial intelligence (mainly conversational) such as Natural Language Processing (NLP) and speech recognition (SR). Finally, [8] describes developing an autonomous system (in High-tech Defense Industries).

Digital Twins and Smart Contracts in Assembly 4.0

The cyber physical systems vision includes digital twin (DT) for each physical part, sub-assembly and complete product. In [9] I describe a framework that includes a massive DT for the whole assembly-line, a DT for each workstation, and a DT for each product. The product DT is gradually filled with assembly documentation as the assembly progresses. This framework is used in [10] which develops an automated monitoring mechanism using smart contracts.

Technology integration in Industry 4.0

A significant part of [2] is devoted to various Industry 4.0 enabling technologies and their integration. A proposed smart process controller framework for Industry 4.0 settings is presented in [6] and more detailed machine learning usage is presented in [5]. Technology integration in Industry 4.0 is also described in [11]. A literature review of "Enabling Digital Technologies" is presented in [12] and some other technologies are mentioned by [13].

Self-awareness of systems in Assembly 4.0

Assembly systems maintenance could be significantly improved using the concept of self-awareness. In [14, and 15] a hierarchy of Smart Awareness in Assembly 4.0 is presented, along with analysis of the characteristics of self-awareness of sensors, parts, sub-assemblies and completed products.

A4 - Skills fit in Industry 4.0

I analyzed the skills necessary for Industry 4.0 settings and found a new type of skills presented in [16]. Also, an analysis programming, digitalization and AI skills required for Industry 4.0 and 5.0 shopfloors, is described in [17].

Cobots (collaborative robots) in Assembly 4.0

In 2019 I described in [18] a strategic decision model on when and where should cobot deployment take place in Assembly 4.0 Systems. This model was extended later [19]. Finally, a more comprehensive study on the decision for deploying cobots was published in [20]. This study includes detailed productivity analysis and many additional considerations for deploying cobots in assembly systems:

Human machine interaction & Artificial emotional Intelligence in Ass. 4.0

I published several conference and journal papers related to Human Machine Interaction (HMI). In [7] conversational systems are examined for finding synergetic opportunities for integrating AI in these systems. In [12] an operator assistive system is examined. In [21] I present a future standard interaction system for workstation–operator operation. This study was further extended in [22].

In 2019 I explored opportunities for integrating artificial emotional intelligence in HMI [23]. This was combined with a study on the operators' preferences to yield [24].

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