

Curriculum Vitae

Claudio Szwarcfiter

Faculty of Industrial Engineering and Technology Management
Holon Institute of Technology
Israel
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Date and place of birth: August 1968, Brazil
Languages: Portuguese (mother tongue), English, Hebrew

Education

- Ph.D.** Industrial Engineering and Management
Technion — Israel Institute of Technology, Haifa, Israel
2021
GPA: 94.2
Title of thesis: Multimode chance-constrained project scheduling problems: Formulation, solution and testing
Advisors: Prof. Avraham Shtub and Prof. Yale Herer
- M.S.** Industrial Engineering
Catholic University of Rio de Janeiro (PUC-Rio), Brazil
1995
GPA: 86
Title of thesis: The crisis in Fordism and its consequences on production organization
Advisor: Prof. Paulo Roberto Tavares Dalcol
- PgD.** Financial Management
Getulio Vargas Foundation (FGV), Rio de Janeiro, Brazil
1992
- B.S.** Chemical Engineering
Federal University of Rio de Janeiro (UFRJ), Brazil
1991

Academic Appointments

Fall 2022 – current	Lecturer (Senior faculty member) Courses: Project Management, Production Systems Management, Introduction to Probability, Introduction to Programming with Python, Introduction to Industrial Engineering and Technology Management, Project Management Laboratory Faculty of Industrial Engineering and Technology Management Holon Institute of Technology, Holon, Israel
Fall 2022 – current	Lecturer Advanced Methods in Project Management Faculty of Data and Decision Sciences Technion — Israel Institute of Technology, Haifa, Israel
Fall 2022 – current	Lecturer Introduction to Project Management (Simulation workshop, in English) Kinneret Academic College Technion — Israel Institute of Technology, Haifa, Israel
Fall 2021 – current	Teaching assistant Course: New Product Development Global Network for Advanced Management Faculty of Data and Decision Sciences Technion — Israel Institute of Technology, Haifa, Israel; and Yale School of Management, New Haven, CT
Spring 2022	Lecturer Course: Advanced Project Management Faculty of Engineering Ruppin Academic Center, Emek Hefer, Israel
Spring 2022	Lecturer Course: The Modern Supply Chain Faculty of Engineering Ruppin Academic Center, Emek Hefer, Israel
Fall 2021	Lecturer Course: Supply Chain Simulation MA in Logistics and Global Supply Chain Faculty of Engineering Ruppin Academic Center, Emek Hefer, Israel
Fall 2021	Lecturer Course: Supply Chain Management and Innovation MA in Logistics and Global Supply Chain Faculty of Engineering Ruppin Academic Center, Emek Hefer, Israel

Spring 2021	Teaching assistant Course: Advanced Project Management — Managing New Product Development (In English) Faculty of Engineering Ruppin Academic Center, Emek Hefer, Israel
Fall 2020 – Fall 2022	Postdoctoral researcher Department of Industrial Engineering Tel Aviv University, Israel Supervisors: Prof. Yossi Bukchin, Prof. Tal Raviv
Fall 2020 – Fall 2021	Lecturer Course: Project Management Department of Industrial Engineering and Management Ben Gurion University, Beer Sheva, Israel
Spring 2017 – Spring 2023	Teaching assistant Teaching: Advanced Methods in Project Management Homework grading: Statistics, Probability and Statistics, Deterministic Models in Operations Research Faculty of Industrial Engineering and Management Technion — Israel Institute of Technology, Haifa, Israel
Fall 1996 – Fall 1997	Visiting Scholar The Robotics Institute Carnegie Mellon University, Pittsburgh, Pennsylvania
Fall 1995 – Spring 1996	Lecturer Production Planning and Control, Industrial Layout, Technology and Production Organization (graduate) Department of Industrial Engineering Catholic University of Rio de Janeiro (PUC-Rio), Brazil
Fall 1988 – Fall 1990	Teaching Assistant Thermodynamics, Heat Transfer School of Chemistry Federal University of Rio de Janeiro, Brazil
Spring 1988	Awarded a Scientific Initiation scholarship by the National Research Council (CNPq) School of Chemistry Federal University of Rio de Janeiro, Brazil Supervisor: Professor Carlos Augusto Perlingeiro

Current Research Interests

Project management and scheduling, sustainable logistics, reinforcement learning and machine learning applications, simulation

Public Professional Activities

- Guest editor for special issue of *Sustainability* (ISSN 2071-1050): “The Complexity of Sustainable Project Management” (2022).
- Referee for: *IEEE Transactions on Engineering Management, Computers & Operations Research, ASCE Journal of Management in Engineering, Mathematical Problems in Engineering, Annals of Operations Research, Journal of the Operational Research Society*

Honors

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| 2021 | Project Management Institute (PMI) James R Snyder International Student Paper of the Year Award. Title of the paper: Modeling and solving the tradeoff between project value and net present value. USD 550.00 |
| 2021 | Second prize for outstanding paper. IE & M 2021: 22 nd National Industrial Engineering and Management Conference, Israel. Title of the paper: Modeling and solving the tradeoff between project value and net present value. NIS 1000.00 |
| 2021 | Finalist for the best student paper award. PMS 2021: 17 th International Conference on Project Management and Scheduling, Toulouse. Title of the paper: Maximizing value — modeling and solving lean project management |
| 2020 | Nahmani Prize, Faculty of Industrial Engineering and Management, Technion. NIS 1750.00 |

Publications

- Shtub, A., & Szwarcfiter, C. (2024). The agile project management scheduling problem—definition and discussion. *PMS 2024: 19th International Conference on Project Management and Scheduling, extended abstract*.
- Szwarcfiter, C., Bukchin, Y., & Raviv, T. (2024). Planning and pricing full truck-load transportation services in a two-sided platform: Profit maximizer vs. social planner. *TechRxiv*. <https://doi.org/10.36227/TECHRXIV.172174931.17601523/V1>

- Szwarcfiter, C., & Herer, Y. T. (2024). Managing the balance between project value and net present value using reinforcement learning. *IEEE Access*, 12, 7500–7518. <https://doi.org/10.1109/ACCESS.2023.3346789>
- Szwarcfiter, C., Herer, Y. T., & Shtub, A. (2024). Reinforcement Learning for Lean and Robust Project Scheduling under Duration Uncertainty. *PMS 2024: 19th International Conference on Project Management and Scheduling*, extended abstract.
- Szwarcfiter, C., Herer, Y. T., & Shtub, A. (2023a). Balancing project schedule, cost, and value under uncertainty: A reinforcement learning approach. *Algorithms*, 16, 395. <https://doi.org/10.3390/A16080395>
- Szwarcfiter, C., Herer, Y. T., & Shtub, A. (2023b). Shortening the project schedule: Solving multimode chance-constrained critical chain buffer management by reinforcement learning. *Annals of Operations Research*. <https://doi.org/10.1007/S10479-023-05597-8>
- Szwarcfiter, C., Herer, Y. T., & Shtub, A. (2022). Project scheduling in a lean environment to maximize value and minimize overruns. *Journal of Scheduling*, 25, 177–190. <https://doi.org/10.1007/s10951-022-00727-9>
- Szwarcfiter, C. (2020). *Multimode chance-constrained project scheduling problems: formulation, solution and testing* [Doctoral dissertation, Technion - Israel Institute of Technology].
- Szwarcfiter, C., Shtub, A., & Herer, Y. T. (2020a). Maximizing value—modeling and solving lean project management. *PMS 2020: 17th International Conference on Project Management and Scheduling*, extended abstract. <https://pms2020.sciencesconf.org/298313/document>
- Szwarcfiter, C., Shtub, A., & Herer, Y. T. (2020b). Solving the stochastic multimode resource-constrained project scheduling problem. *PMS 2020: 17th International Conference on Project Management and Scheduling*, extended abstract. <https://pms2020.sciencesconf.org/298323/document>
- Szwarcfiter, C., & Dalcol, P. R. T. (1997). Economias de escala e de escopo: desmistificando alguns aspectos da transição (Economies of scale and scope: Demystifying some aspects of the transition). *Production*, 7(2), 117–129. <https://doi.org/10.1590/S0103-65131997000200001>
- Szwarcfiter, C. (1995). *The crisis in fordism and its consequences on production organization* (MSc dissertation). Catholic University of Rio de Janeiro.

Submitted for publication

- Szwarcfiter, C., Bukchin, Y., & Raviv, T. (n.d.). *Improving full truckload utilization by a secondary marketplace platform under profit maximizer and social planner*.

Conference presentations

- Reinforcement learning for lean and robust project scheduling under duration uncertainty. PMS 2024: 19th International Workshop on Project Management and Scheduling, Bern, Apr 2–5, 2024
- A secondary full truckload marketplace for maximizing profit and reducing empty truck runs.
 - ORSIS (Operations Research Society of Israel) 2022 conference, May 30–31, 2022
 - Digital Living 2030: The Tel Aviv University – Stanford Partnership, annual meeting, Mar 30, 2022
- Secondary full truck load marketplace in a physical internet environment.
 - IFORS 2021 Virtual: The 22nd Conference of the International Federation of Operational Research Societies, Seoul, Aug 23–27, 2021
 - EURO 21: 31st European Conference on Operational Research, Athens, July 11–14, 2021
 - Digital Living 2030: The Tel Aviv University – Stanford Partnership, annual meeting, Mar 24, 2021
- Modeling and solving the tradeoff between project value and net present value.
 - ORSIS (Operations Research Society of Israel) 2021 conference, Aug 2–3, 2021
 - IE & M 2021: 22nd National Industrial Engineering and Management Conference, Israel, Jun 2, 2021
- Maximizing value—modeling and solving lean project management. PMS 2021: 17th International Conference on Project Management and Scheduling, Toulouse, Apr 21–23, 2021
- Solving the stochastic multimode resource-constrained project scheduling problem. PMS 2021: 17th International Conference on Project Management and Scheduling, Toulouse, Apr 21–23, 2021
- Value stability in multimode projects with stochastic activity durations.
 - ORSIS (Operations Research Society of Israel) 2019 conference, May 13, 2019
 - POMS 30th annual conference, Washington D.C., May 5, 2019
 - 21st conference of industrial engineering and management, Israel, Apr 1, 2019
- Market Fragmentation: Driver of change in production organization. XV ENEGEP - National Conference on Production Engineering, São Carlos, SP, Brazil, Sep 4, 1995

Test Scores

GRE, August 2015

Scores: Quantitative Reasoning: 162 — meaning that 83% of all test takers scored below. Verbal Reasoning: 164 — meaning that 94% of all test takers scored below.

IELTS (International English Language Tests)

Score: 8.5 out of 9