Joren Gijsbrechts

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EDUCATION

University of Antwerp Antwerp, Belgium B.Sc. & M.Sc. Applied Economics Sep. 2009 - June 2012 KU Leuven Leuven, Belgium Sep. 2016 - August 2020 Ph.D. Operations Management Experience Assistant Professor Sep. 2023 – Present Esade Business School, Ramon Llull University Barcelona, Spain • Teaching core Operations and Business Analytics courses. Assistant Professor Sep. 2020 – Aug. 2023 Catolica Lisbon School of Business and Economics Lisbon, Portugal • Taught core Operations and Business Analytics courses. Visiting Scholar Jan. 2023 – March. 2023 MIT Sloan School of Management Cambridge, Massachussets • Joint Research with professor Vivek Farias. Visiting PhD student Sep. 2019 – Dec. 2019 Kellogg School of Management Evanston, Illinois • Joint Research with professor Jan A. Van Mieghem.

Publications

Journal Articles

- Gijsbrechts J, Van Staden HE. Where Did the Demand Go? Teaching Demand Censoring with the Newsvendor Challenge. INFORMS Transactions on Education (2024). DOI:10.1287/ited.2024.0085
- Gijsbrechts J, Imdahl C, Boute RN, Van Mieghem J. Optimal Robust Inventory Management with Volume Flexibility: Matching Capacity and Demand with the Lookahead Peak-Shaving Policy. *Production and Operations Management* (2023). DOI:10.1111/poms.14069
- Gijsbrechts J, Boute RN, Disney SM, Van Mieghem JA. Volume Flexibility at Responsive Suppliers in Reshoring Decisions: Analysis of a Dual Sourcing Inventory Model. *Production and Operations Management* (2022). DOI:10.1111/poms.13719
- Gijsbrechts J, Boute RN, Van Mieghem JA, Zhang DJ. Can Deep Reinforcement Learning Improve Inventory Management? Performance on Dual Sourcing, Lost Sales and Multi-Echelon Problems. *Manufacturing & Services Operations Management* 24(3):1261–1885 (2022). DOI:10.1287/msom.2021.1064
- Boute RN, Disney SM, Gijsbrechts J, Van Mieghem JA. Dual Sourcing and Smoothing under Non-Stationary Demand Time Series: Re-shoring with SpeedFactories. *Management Science* 68(2):1039–1057 (2021). DOI:10.1287/mnsc.2020.3951
- De Moor B, Boute RN, Gijsbrechts J. A reward shaping approach to improve the applicability of deep reinforcement learning to inventory management. *European Journal of Operational Research* 301(2):535–545 (2021). DOI:10.1016/j.ejor.2021.10.045
- Boute RN, Gijsbrechts J, van Jaarsveld W, Vanvuchelen N. Deep reinforcement learning for inventory control: A roadmap. European Journal of Operational Research 298(2):401–412. DOI:10.1016/j.ejor.2021.07.016
- Yee H, Boute RN, Gijsbrechts J. Synchromodal Planning under Stochastic Travel Times. Computers in Industry 125:103367 (2021). DOI:10.1016/j.compind.2020.103367
- Vanvuchelen N, Gijsbrechts J, Boute RN. Use of Proximal Policy Optimization for the Joint Replenishment Problem. Computers in Industry 119:103239 (2020). DOI:10.1016/j.compind.2020.103239

Working Papers

- Farias V, Gijsbrechts J, Khojandi A, Peng T, Zheng A. Speeding up Policy Simulation in Supply Chain RL. Working paper at MIT. arXiv:2406.01939
- Bertani N, Gijsbrechts J, Godinho de Matos M, Wagner L. Reminders in a Resource Scarce Setting: The Case of Mobile Data Consumption. Working paper at Católica Lisbon School of Business & Economics. https://ssrn.com/abstract=4911622
- De Moor B, Boute RN, Gijsbrechts J. When do Shippers Match? Managing Inventory with Capacitated Discount Opportunities. Working paper at KU Leuven.
- Gijsbrechts J, Olivares Nadal A, Wagner L. Replenishing a Try-Before-You-Buy Channel in Online Retail. Working paper at Esade, Ramon Llull.

Book Chapters

Current Teaching

Esade Business School

Full-time MBA – Business Analytics

• Boute RN, Gijsbrechts J, Van Mieghem JA. Digital Lean Operations: Smart Automation and Artificial Intelligence in Financial Services. In: Babich V, Birge J, Hilary G (eds) Innovative Technology at the interface of Finance and Operations. Springer Series in Supply Chain Management, forthcoming, Springer Nature (2021).

2023-present

Teaching

Full-time MBA – Supply Chain Management Esade Business School	2023–present
$ \begin{array}{l} \textbf{MSc Sustainability} - \textbf{Data Science and Operations for Sustainability} \\ \textit{Esade Business School} \end{array} $	2023-present
Invited Teaching	
Data-driven Decision-Making and Business Analytics – Executive-MBA CLSBE, Lisbon, Portugal	2022-present
Inventory Control and Machine Learning in Supply Chains University of Antwerp, Belgium	2019–present
Postgraduate Smart Logistics – Green Transport and Machine Learning KU Leuven Kortrijk, Belgium	2019–present
Past Teaching	
Company Workshop for GB Foods on Data-Driven Organizations Esade Business School	2025
Operations Management – Executive Masters Program CLSBE, Lisbon, Portugal	2021-2022
Supply Chain Management - M.Sc. CLSBE, Lisbon, Portugal	2021-2023
Advanced Predictive Analytics - M.Sc. CLSBE, Lisbon, Portugal	2022-2023
Operations Analytics - M.Sc. CLSBE, Lisbon, Portugal	2022-2023
Introduction to Operations Management - B.Sc. CLSBE, Lisbon, Portugal	2020–2023

Data-driven Decision Making and Business Analytics - B.Sc. CLSBE, Lisbon, Portugal	2022–2023
PhD Class on Deep Reinforcement Learning in Inventory Management $NYU\ Stern\ School\ of\ Business,\ US$	2022
PhD Class on Deep Reinforcement Learning in Inventory Management $\mathit{Wharton},\ \mathit{US}$	2022
${\bf Supply\ Chain\ Bootcamp-Impact\ of\ Machine\ Learning\ on\ Operations\ Management}$	2019
Workshop on ML in Operations Management Catholic University Milan, Italy	2019