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 Ph.D. Operations Management Sep. 2016 - August 2020 Academic 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.

Jan. 2023 - March. 2023 Visiting Scholar MIT Sloan School of Management Cambridge, Massachussets

• Joint Research with professor Vivek Farias.

Sep. 2019 – Dec. 2019 Visiting PhD student Kellogg School of Management Evanston, Illinois

• Joint Research with professor Jan A. Van Mieghem.

• Prior to starting my Ph.D., I worked two years in industry.

Industry Experience

Advisor, Algorithms March 2020 – present CurveCatchAntwerp, Belgium

- CurveCatch is a start-up disrupting the lingerie industry (www.curvecatch.com).
- I collaborate with the founding team to design and implement algorithms.

Supply Chain Analyst

June. 2014 – Aug. 2016 Procter and Gamble Stockholm, Sweden

- Analyses as part of monthly Sales & Operations planning cycle in Nordic market.

PUBLICATIONS

Journal Articles

- Gijsbrechts J, Van Staden HE. Where Did the Demand Go? Teaching Demand Censoring with the Newsyendor 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. Paper available upon request.
- Gijsbrechts J, Olivares Nadal A, Wagner L. Replenishing a Try-Before-You-Buy Channel in Online Retail. Working paper at Esade, Ramon Llull University.

Book Chapters

• 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).

Teaching

Current Teaching	
Full-time MBA – Business Analytics Esade Business School	2023–present
Full-time MBA – Supply Chain Management Esade Business School	2023-present
$ \begin{array}{c} \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
Supply Chain Bootcamp – Impact of Machine Learning on Operations Management Vlerick Business School, Belgium	2019
Workshop on ML in Operations Management Catholic University Milan, Italy	2019

SERVICE

Reviewer for Management Science, Operations Research, Manufacturing Services & Operations Management, Production and Operations Management, European Journal of Operational Research, International Journal of Production Economics, Omega, INFORMS Journal on Computing.