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
${\bf Supply\ Chain\ Bootcamp-Impact\ of\ Machine\ Learning\ on\ Operations\ Management}\ {\it Vlerick\ Business\ School,\ Belgium}$	2019
Workshop on ML in Operations Management Catholic University Milan, Italy	2019