Cédric Verbeeck, PhD

Professor – Specialty: Operations & Supply Chain
Co-Director of the MSc in Data Analytics
and Artificial Intelligence

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Cédric studied business engineering with a specialization in operations management at Ghent University. During his master thesis he became acquainted with the field of operations research and more in particular with scheduling problems. As a doctoral student of Ghent University, he conducted research on vehicle routing problems suffering from congestion, and tested his solution methods in practice. Afterwards he engaged in a post-doctoral collaboration project with ArcelorMittal Ghent, which aimed at improving the line planning scheduling software of the continuous steel caster. Currently, he is a professor in Operations Management and co-director of the MSc in Data Analytics and Artificial Intelligence.

EDUCATION

2000-2006 **Secondary education: Greek-Mathematics**
St. Bernardus College Oudenaarde
Magna cum laude

2006-2009 **Bachelor: Commercial engineer**, Ghent University
Honours

2009-2011 **Master: Commercial engineer: Operational Management**
Ghent University
Magna cum laude
Master thesis: *Heuristics for the Time-Constrained Project Scheduling Problem (TCPSP)*
Supervisors: Mario Vanhoucke, Vincent Van Peteghem
Description: A metaheuristic solution procedure is developed for the Time-Constrained Project Scheduling Problem, a project scheduling problem in which additional resources can be temporarily allocated to meet a given deadline

2011-2016 **Doctor of engineering**, Ghent University
PhD thesis: *Optimizing Practical Orienteering Problems with Stochastic Time-Dependent Travel Times: towards Congestion Free Routes*
Supervisors: El-Houssaine Aghezzaf, Pieter Vansteenwegen
Description: Logistics companies need to determine which customers to visit, the best order to visit these customers and how to assign the customers to the

available vehicles. Moreover, they have to take into account congestion issues: the travel time between two customers will vary significantly during the day. This problem of optimizing the schedule for a fleet of vehicles can be modelled by a time-dependent orienteering problem. Efficient solution methods were developed to solve these kinds of problems.

2009 **Base Programming SAS 9**, SAS Belgium

EXPERIENCE

2021- **Co-Director of the MSc in Data Analytics and Artificial Intelligence**
EDHEC, Lille

2017- **Assistant Professor, Operations & Supply Chain**. EDHEC, Lille

2016-2017 **Post-doctoral researcher**, Ghent University, Ghent
Collaboration with ArcelorMittal Gent

2013-2016 **PhD student**: **IWT fellow**, Ghent University, Ghent

2012-2013 **PhD student**, Ghent University, Ghent

2011-2012 **Assistant**, Ghent University, Ghent

PUBLICATIONS

Journal Publications

2019

• Guansheng, P., Dewil, R., Verbeeck, C., Gunawan,A. Xing, L. "Agile earth observation satellite scheduling: An orienteering problem with time-dependent profits and travel times," *Computers & Operations Research*, 111, 84-98.

• De Keyser, A., Köcher, S., Alkire (née Nasr), L., Verbeeck, C., and Kandampully, J. (2019), "Frontline Service Technology Infusion: Conceptual Archetypes and Future Research," *Journal of Service Management*, 30(1), 156-183.

2017

• Verbeeck, C., P. Vansteenwegen, and E.-H. Aghezzaf, “A fast solution method for the Time-Dependent Orienteering problem with Time Windows”. In: Annals of Operations Research, pp. 1–20.

2016

• Verbeeck, C., Vincent Van Peteghem, Mario Vanhoucke, P. Vansteenwegen, and E.-H. Aghezzaf, “A Metaheuristic Solution Approach for the Time-constrained Project Scheduling Problem”. In: OR Spectrum doi:10.1007/s00291-016-0458-7, pp. 1–19.

• Verbeeck, C., P. Vansteenwegen, and E.-H. Aghezzaf, "Solving the Stochastic Time-Dependent Orienteering Problem with Time Windows". In: European Journal of Operational Research 255.3, pp. 699–718.

2014
• Verbeeck, C., K. Sörensen, E.-H. Aghezzaf, and P. Vansteenwegen, "A fast solution method for the time-dependent Orienteering Problem". In: European Journal of Operational Research 236 (2), pp. 419–432.

• Verbeeck, C., P. Vansteenwegen, and E.-H. Aghezzaf, "An extension of the arc orienteering problem and its application to cycle trip planning". In: Transportation Research Part E 68, pp. 64–78.

Conference Publications

2015
• Verbeeck, C., E.-H. Aghezzaf, and P. Vansteenwegen, "Solving the stochastic time-dependent orienteering problem with time windows". In: 6th International Workshop on Freight Transportation and Logistics (Odysseus 2015). Ajaccio, France.

2014
• Van Peteghem, V. and C Verbeeck, "A metaheuristic solution approach for the time-constrained project scheduling problem". In: 14th International Conference on Project Management and Scheduling (PMS 2014). Munich, Germany.

• Verbeeck, C., E.-H. Aghezzaf, and P. Vansteenwegen, "Solving the stochastic time-dependent orienteering problem". In: 10ème Conférence Internationale Francophone de Modélisation et Simulation (MOSIM '14). Nancy, France.

• Verbeeck, C., P. Vansteenwegen, and E.-H. Aghezzaf. "Solution methods for the cycle trip planning problem". In: 28th Annual conference of the Belgian Operations Research Society (ORBEL). Mons, Belgium.

• Verbeeck, C., P. Vansteenwegen, and E.-H. Aghezzaf. "The orienteering problem with time-dependent stochastic travel times". In: Third meeting of the EURO Working Group on Vehicle Routing and Logistics Optimization (VeRoLog 2014). Oslo, Norway.

2013
• Verbeeck, C., E.-H. Aghezzaf, and P. Vansteenwegen. "A fast solution method for the time-dependent orienteering problem with time windows". In: 6th Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA-2013). Ghent, Belgium.

• Verbeeck, C. and P. Vansteenwegen. "Solution methods for the time-dependent orienteering problem". In: Eighth Triennial Symposium on Transportation Analysis (TRISTAN 2013). San Pedro de Atacama, Chile.

2012

• Verbeeck, C. and P. Vansteenwegen. "Comparing metaheuristics for the timedependent orienteering problem". In: 25th European Conference on Operational Research (EURO). Vilnius, Lithuania.

• Verbeeck, C. and P. Vansteenwegen. "Congestion avoidance: optimization of vehicle routing planning for the logistics industry". In: 26th Annual Conference of the Belgian Operations Research Society (ORBEL), Brussels, Belgium.

• Verbeeck, C. and P. Vansteenwegen. "Metaheuristics for the time-dependent orienteering problem". In: First Annual Conference of the EURO Working Group on Vehicle Routing and Logistics Optimization (VeRoLog 2012), Bologna, Italy.

TEACHING EXPERIENCE

Undergraduate level

2017- 2019	Operations Management: IT and Logistics - EDHEC Business School
2017-	Operations Management: Purchasing and Supply Chain - EDHEC Business School
2018-2019	Quality and Processes - EDHEC Business School
2018-2019	Global Network Design - EDHEC Business School
2018-2019	Inventory and Logistics - EDHEC Business School

Graduate level

2019-	Operations Research- EDHEC Business School
2019-	Sustainable Operations and Supply Chain- EDHEC Business School
2018-	Customer Analytics- EDHEC Business School (co-lectured with dr. A. De Keyser)
2018-2019	Customer Intelligence, - EDHEC Business School (co-lectured with dr. A. De Keyser)
2018-	Supply Chain Analytics - EDHEC Business School
2016-2019	Supply Chain - EDHEC Business School
2016-	Operations Management - EDHEC Business School
2016-2019	Operational Excellence - EDHEC Business School
2012-2015	Quality management and Industrial Statistics - Ghent University (support lectures as assistant)
2011-2012	Design of Manufacturing and Service Operations - Ghent university (support lectures as assistant)
2011-2014	Methods Engineering and Work Measurement - Ghent University (support lectures as assistant)

LANGUAGES

- Dutch - Native Mother Tongue
- English - Fluent Daily practice, all work performed in English
- French - Average
- Spanish - Notions
- German - Notions

SKILLS

Programming

- C++, R, LaTeX, SAS, Java, HTML, SQL

Software

- Office, Adobe Photoshop, SPSS, Mathematica, Minitab