Philippe Olivier

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CONTRACT WORK	**Kaster**	10/2023–Now
	• Applied research scientist	
	• Production planning and scheduling for pharmaceutical products	
	Integrated Reasoning	06/2023–Now
	• Scientific advisor	
	• Operations research, modeling, and optimization	
	pganalyze	08/2022–Now
	• Applied research scientist	
	• Optimizing and automating index selection in databases	

EDUCATION	**Polytechnique Montréal**	08/2016–05/2021
	PhD, Computer Engineering	
	Université Laval	08/2012–05/2016
	BSc, Computer Science	

RESEARCH

INTERESTS

- Operations research
- Constraint programming
- Integer programming

PUBLICATIONS

Fairness over Time in Dynamic Resource Allocation with an Application in Healthcare
Lodi, A., Olivier, P., Pesant, G., and Sankaranarayanan S.
Mathematical Programming (2022)

Measures of Balance in Combinatorial Optimization
Olivier, P., Lodi, A., and Pesant, G.
4OR (2021)

The Quadratic Multiknapsack Problem with Conflicts and Balance Constraints
Olivier, P., Lodi, A., and Pesant, G.
INFORMS Journal on Computing (2020)

A Comparison of Optimization Methods for Multi-Objective Constrained Bin Packing Problems
Olivier, P., Lodi, A., and Pesant, G.
Integration of AI and OR Techniques in Constraint Programming, Delft, Netherlands, (CPAIOR 2018) (2018)

CONFERENCE PRESENTATIONS

PGCon 2023 (Ottawa, Canada)   06/2023
Automating Index Selection Using Constraint Programming

JOPT 2023 (Montreal, Canada) 05/2023
Optimizing Database Index Selection Using Constraint Programming

CPAIOR 2018 (Delft, Netherlands) 06/2018
A Comparison of Optimization Methods for Multi-Objective Constrained Bin Packing
Problems

JOPT 2018 (Montreal, Canada) 05/2018
A Comparison of Optimization Methods for Multi-Objective Constrained Bin Packing
Problems

IFORS 2017 (Quebec, Canada) 07/2017
Solving the Wedding Seating Problem by Constraint Programming

POSTER PRESENTATIONS

CP 2019 (Stamford, United States) 10/2019
Measures of Balance in Combinatorial Optimization

MEMBER

Laboratoire Quosséça 08/2016–05/2021
Canada Excellence Research Chair in Data Science 08/2016–05/2021
for Real-Time Decision-Making

TEACHING	COURSE LECTURER	
	Polytechnique Montréal	
	• INF1005D: Procedural Programming in Python	01/2023–05/2023
	• INF1005D: Procedural Programming in Python	08/2022–12/2022
	• INF1005D: Procedural Programming in Python	08/2021–12/2021
	Université du Québec à Montréal	
	• INF1070: Administration of Computer Systems (two classes)	08/2022–12/2022
	• INF1070: Administration of Computer Systems	01/2022–04/2022
	TEACHING ASSISTANT	
	Polytechnique Montréal	
	• INF4705/INF8775: Algorithm Design	01/2018–12/2019
	Université Laval	08/2013–12/2013

PROJECTS	**Fantasy Solver**	06/2021–Now

Multi-objective solver for optimal lineup generation in multi-entry *Daily Fantasy Sports*
(DFS) tourneys. It is, to my knowledge, the only exact solver for generating provably
optimal sets of lineups for DFS tourneys.