philippe@pedtsr.ca github.com/Philippe0livier linkedin.com/in/Philippe0livier +1 514-433-5700

CONTRACT WORK

Tribe AI

07/2024 - Now

- Applied research scientist
- Job scheduling in the automotive industry

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

Kaster 10/2023-05/2024

- Applied research scientist
- Production planning and scheduling for pharmaceutical products

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 Canada Excellence Research Chair in Data Science for Real-Time Decision-Making 08/2016 - 05/202108/2016 - 05/2021

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.