

#### Inria Associate Researcher · Mathematical Optimization

The Big Lab, 3rd Main Street, University Town

### Experience \_

#### Chargé de Recherche - Associate Researcher

Grenoble, France

Inria, Grenoble Alpes University

January 2024 - today

Associate Researcher, POLARIS team, Grenoble Computer Science Laboratory.

**Postdoctoral Researcher** 

Berlin, Germany

Zuse Institute Berlin

January 2021 - December 2023

Mathematical Optimization Department.

**My Former Position in Industry** 

The Island City, France August 2016 - September 2017

BIGCORP

Pre-PhD years in Industry.

**Education** \_\_\_\_\_

Double Ph.D. Program

Polytechnique Montréal, Centrale Lille

September 2017 - December 2020

Title: A fancy thesis on hard problems. Advisors: Prof A, Prof B

Ph.D. in Applied Mathematics and Computer Science.

Master's Thesis

OtherUniversity

A CAREFULLY CHOSEN TOPIC

February - July 2016

Joint Bachelor and Master's of Science

Université de Technologie de Compiègne

Major in Process Engineering, minor in Mathematical Modelling

September 2011 - August 2016

## **Publications** \_

# **Technical Reports and Working Papers**

[1] Y. Chasseray, M. Besançon, É. Petitdemange, and X. Lorca, *Optimisation Models for the Design of Multiple Self-Consumption Loops in Semi-Rural Areas*, 2404 (2024)

#### **Journal Articles**

[2] A. Carderera, M. Besançon, and S. Pokutta, Scalable Frank–Wolfe on Generalized Self-Concordant Functions via Simple Steps, SIAM Journal on Optimization (2024)

#### **Conference Papers**

[3] G. Mexi, S. Shamsi, M. Besançon, and P. Le Bodic, *Probabilistic Lookahead Strong Branching via a Stochastic Abstract Branching Model*, in *International Conference on Integration of Constraint Programming*, *Artificial Intelligence*, *And Operations Research* (2024)

[4] M. Turner, T. Berthold, and M. Besançon, A Context-Aware Cutting Plane Selection Algorithm for Mixed-Integer Programming, in Operations Research Proceedings (2023)

# Supervision \_\_\_\_\_

#### Ph.D. Candidates

• FirstName Candidate, BigSchool. 7.2023 - today. With BigProf.

#### **Recent Master's Theses**

• ABC XYZ, Mathematics at Big Univ, Solving hard problems with nice methods, a polyhedral approach 12.2022 - 5.2023. With BigProf.

### Recent and Selected Talks \_\_

Jul 2024 - Seminar LIG laboratory, Grenoble, Introduction to Benders' Decomposition and Applications

## Research Visits \_

- BigUniv, Industrial and Systems Engineering, May 2024
- CoolSchool, Institute of Applied Mathematics, March 2023

# **Teaching Activities** \_\_\_\_\_

#### **Advanced Methods of Operations Research**

Master's of Operations Research, Combinatorics, and Optimization

Université Grenoble Alpes

October 2024 - January 2025

# Projects \_\_\_\_

FrankWolfe.jl

DESIGNER/DEVELOPER

C ZIB-IOL/FrankWolfe.jl

Feb. 2021 - Present

# **Competitive Funding** \_\_\_

- Travel grant from Institution, to attend BigConf, 2024
- Young Investigator Grant, BigLab, funding the Ph.D. of ABC, 2023

# Community Service \_\_\_\_\_

### Reviewing activities

Mathematical Programming, Computers and Operations Research CPAIOR 24 PC member.

### **Conference Organization**

BigConf 2025, PC member.

#### **Other Service**

• Selection committee member, assistant professor position, Big School, 2024