Juan Pablo Cantillana

Department of Business Decisions and Analytics
University of Vienna
E-mail | GitHub | Personal Website

Research Interests

Routing Methods, Machine Learning, Logistics and Deliveries, Mathematical Modeling, Industrial applications.

Experience

Vienna, AT	**Department of Business Decisions and Analytics, University of Vienna**
2024 -	*Research Staff — Prae-Doc.*
2025 -	*Lecturer of Transportation Logistics for Bachelors.*
Zurich, CH	**Department of Engineering, Nezasa**
2023 - 2024	*Manager — Research Engineer.*
2020 - 2023	*Optimization Engineer* for design and development of product *TripOptimizer*.
Rancagua, CL	**Department of Industrial Engineering, Universidad de O'Higgins**
2021 - 2021	*Lecturer of Applied Statistics for Bachelors.*
Santiago, CL	**Department of Industrial Engineering, Universidad de Chile**
2019 - 2020	*Research Assistant* for last-mile delivery project.

Education

Vienna, AT	**Doctorate in Business Analytics, Logistics and Operations Research**
2024 -	*University of Vienna*
Santiago, CL	**Master of Science in Operations Management**
2018 - 2020	*Universidad de Chile*
Santiago, CL	**Bachelor of Science in Industrial Engineering**
2013 - 2018	*Universidad de Chile*

Work in Progress

Learning the Ng-path relaxation in BPC for the CVRPTW
With Christian Tilk, funded by FWF project *Maschinelles Lernen in BPC für Tourenplanungsprobleme*.
Design of a PVRP Heuristic for Parcel Deliveries in a Metropolitan Area
With Fernando Ordóñez, and Cristián Cortés, funded by Agrosuper
TripOptimizer: An optimization-based for trip planning
Main work of José Miguel González, with Fernando Ordóñez, and Cristián Cortés

Conferences and Workshops

2025 Trento	EURO Working Group on Vehicle Routing and Logistics Optimization VEROLOG presenting *Learning the Ng-path relaxation in BPC for the CVRPTW*.
2025 Paris	School on Column Generation.
2025 Traunsee	Complex Networks: Analysis and Modelling their Dynamics by IAT.
2024 Krems	ÖGOR Summer-School for PhD-candidates and Post-Docs.
2024 Rancagua	International Workshop on Bilevel Optimization IWOBIP.
2023 Santiago	IFORS, presenting *Design of PVRP heuristic for parcel deliveries in a metropolitan area*.

Technical Skills

Programming	Python (NumPy, PyTorch, Scikit-learn), R, C++, SQL.
Optimization	Linear/Integer Programming, Metaheuristics, Heuristic Design.
Areas	Machine Learning for Combinatorial Optimization, Routing Algorithms, Logistics, Mathematical Modeling.
Tools	Git, Linux, LaTeX, NumPy, PyTorch, Scikit-learn, Gurobi/CPLEX/SCIP/Coin-OR, Docker.

Internships

2019 Santiago	*Experian*: Updating implementation of *Predicta* model for risk assessment.
2018 Rancagua	*Agrosuper*: Optimize product assignment on the 1st mile.
2017 Malloa	*Agrofoods*: Statistical process control and documentation of maintenances.

Languages

Spanish (Native)   English (B2)   German (B1)