Juan Pablo Cantillana

Department of Business Decisions and Analytics University of Vienna E-mail: juan.pablo.cantillana.abarca@univie.ac.at Webpage: jpCantillana.github.io/page

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.
$2024~\mathrm{Krems}$	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

 $\label{eq:programming} Python \ (NumPy, \, PyTorch, \, Scikit-learn), \, R, \, C++, \, SQL.$

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.

2025 Malloa Agrofoods: Statistical process control and documentation of maintenances.

Languages

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