Juan Pablo Cantillana

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

Research Interests

Routing Methods, Machine Learning, Logistics, Mathematical Modeling.

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
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

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 $Maschinelles\ Lernen\ in\ BPC\ f\"ur\ Tourenplanungsprobleme.$

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

Technical Skills

 $\begin{array}{ll} {\rm Programming} & {\rm Python} \ ({\rm NumPy}, \, {\rm PyTorch}, \, {\rm Scikit\text{-}learn}), \, {\rm R}, \, {\rm C}\text{++}, \, {\rm SQL}. \\ {\rm Optimization} & {\rm Linear/Integer} \ {\rm Programming}, \, {\rm Metaheuristics}, \, {\rm Heuristic} \ {\rm Design}. \end{array}$

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.

Languages

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