

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
Phone: +43 660 1165637

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

Education

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

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 <i>Learning the Ng-path relaxation in BPC for the CVRPTW</i> . |
| 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 <i>Design of PVRP heuristic for parcel deliveries in a metropolitan area</i> . |

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, L ^A T _E X, NumPy, PyTorch, Scikit-learn, Gurobi/CPLEX/SCIP/Coin-OR, Docker. |

Internships

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

Languages

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