Matías Romero Yáñez

PhD Candidate at Columbia Business School (DRO division)   mer2262@columbia.edu

EDUCATION

- **Columbia University** *September 2022 - May 2027 (Expected)*
  PhD in Decision, Risk and Operations division (DRO). New York, US
- **Universidad de Chile** *August 2020 - March 2022*
  Master's Degree in Operations Management. Santiago, Chile
- **Universidad de Chile** *March 2015 - July 2020*
  Bachelor's Degree in Mathematical Engineering. Santiago, Chile

EXPERIENCE

- **Center for Mathematical Modeling** *April 2020 - September 2020*
  Research Assistant Santiago, Chile (Remote)
  ◦ Global study of relevant variables in the spread and lethality of COVID-19.

- **Telefónica Chile S.A.** *January 2020 - March 2020*
  Research Intern Santiago, Chile
  ◦ Design and development of new customers' features for Machine Learning algorithms: entropy and predictability.

- **Information and Decision Systems Group, IDS, Universidad de Chile** *December 2017 - December 2018*
  Research Assistant Santiago, Chile
  ◦ Design and development of inference tools for Photometry.

SKILLS

Programming and Tools: Python, SQL, Julia, MATLAB, Excel, AMPL, R, LaTeX, Git.
Languages: Spanish (Native), English.

PUBLICATIONS

- *"Potential-Based Greedy Matching for Dynamic Delivery Pooling,"*, with Hongyao Ma and Will Ma.
  Accepted in Web and Internet Economics (WINE), 2025.
  Finalist, the first INFORMS TSL Data-Driven Research Challenge.
  Journal version under review (avilable at https://arxiv.org/pdf/2502.16862).
- *"Tight Asymptotics of Extreme Order Statistics"*, with José Correa and Frederik Mallmann-Trenn.
  Accepted in Advances in Neural Information Processing Systems (NeurIPS), 2025.
  Journal version under preparation.
- *"A Linear and Scalable Cutting-Plane Algorithm for Electricity Pricing"*, with Felipe Verástegui and Matías Villagra.
  Accepted in IEEE Power & Energy Society General Meeting (PESGM), 2025.
  Journal version under preparation.
- *"On the Asymptotic Behavior of the Expectation of the Maximum of IID Random Variables"*, with José Correa.
  Operations Research Letters, 49:785-786, 2021.

WORK IN PROGRESS

- *"Courier Ranking and Pricing"*, with Hongyao Ma and Will Ma.

SELECTED TALKS

- *"Courier Ranking and Pricing"*
  ◦ INFORMS Annual Meeting, Atlanta GA October 2025

- *"Potential-Based Greedy Matching for Dynamic Delivery Pooling"*
  ◦ WINE 2025 December 2025
  ◦ INFORMS Annual Meeting, Atlanta GA October 2025
  ◦ RMP Annual Conference, New York July 2025
  ◦ Marketplace Innovation Workshop, (Online) May 2025
  ◦ INFORMS Annual Meeting, Seattle, WA October 2024

- *"On the Asymptotic Behavior of the Expectation of the Maximum of IID Random Variables"*
  ◦ Workshop in Management Science, Puerto Varas, Chile Summer 2023

TEACHING EXPERIENCE

- **Columbia Business School**
  TA for Supply Chain Management (MBA Elective).   Fall 2025
  TA for Supply Chain Analytics (MS&E Elective).   Fall 2025
  TA for Operations Management (MBA Core).   Summer 2025
  TA for Operations Management (EMBA Core).   Spring 2024, 2025
  TA for Foundations of Stochastic Modeling (PhD Core).   Spring 2024
  TA for Technology Breakthroughs (MBA Elective).   Spring 2024
- **Universidad de Chile**
  Lecturer of Modeling and Optimization (BS Core).   Spring 2022
  TA for Algorithmic Game Theory (MS Elective)   Spring 2022
  TA for Stochastic Models in Engineering Systems (MS and PhD Core)   Fall 2021
  TA for Decision Making Under Uncertainty (BS Core)   Fall, Spring 2021
  TA for Probability and Statistics (BS Core)   Fall 2021
  TA for Probability for Mathematicians (BS Core)   Spring 2020
  TA for Markov Processes (BS Core)   Fall 2019
  TA for Multivariate Calculus (BS Core)   Fall 2018,2019
- **Universidad de O'Higgins**
  TA for Game Theory (BS Elective)   Spring 2021

PROFESSIONAL SERVICES

- Co-organizer of the NYC Operations Day PhD Colloquium   2025
- Brown Bag (DRO Internal Seminar) Series Co-Organizer   2024-2025
- DRO PhD Student Representative   2024-2025
- **Conference and workshop reviewing**
  ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO)   2024-2025

HONORS AND AWARDS

- Paul and Sandra Montrone Fellowship, Columbia University   2022,2025
- Doctoral Fellowship, Columbia University   2022-2027
- Outstanding Student Award, Universidad de Chile   2015,2019,2020
  Yearly recognition awarded to students within the top 10% GPA of the cohort.