





Benjamín Barrientos Foncea

PhD Candidate at the MIT Operations Research Center - bbarri@mit.edu
Cambridge, MA

EDUCATION

- **Massachusetts Institute of Technology** *September 2022 - June 2026 (Expected)*
PhD in Operations Research. Cambridge, US
- **University of Chile** *March 2021 - March 2022*
Master's Degree in Operations Management. Santiago, Chile
 - Graduated with honors, recognized as the top graduate of the cohort.
- **University of Chile** *March 2015 - December 2020*
Bachelor's Degree in Applied Mathematics. Santiago, Chile

EXPERIENCE

- **Massachusetts Institute of Technology**  *September 2022 - Present*
Research Assistant Cambridge, US
 - Supervisor: Daniel Freund.
- **Center for Mathematical Modeling**  *April 2020 - September 2020*
Research Intern Santiago, Chile (Remote)
 - Conducted research to better understand COVID-19 using data analysis and machine learning methods.
 - Analyzed various country-specific variables (structural, coronavirus-specific, and controllable) to predict fatality rates, infection numbers, and deaths per million inhabitants. Research findings were published on the website of the Mathematical Modeling Center.
- **VTR Chile**  *January 2020 - March 2020*
Quantitative Research Intern Santiago, Chile
 - Developed and implemented a predictive model for daily field technician assignments, where we utilized simulations and time series analysis for accurate predictions.
- **LVA Índices**  *January 2019 - March 2019*
Quantitative Research Intern Santiago, Chile
 - Conducted research and developed predictive models in the company's research department.
 - Developed models to: (i) predict bond prices and (ii) forecast the performance of Salmon Award winners (Chile's top mutual fund recognition).

WORK IN PROGRESS

- "Online matching and market imbalance", with Daniel Freund and Daniela Saban.

TEACHING EXPERIENCE

- **MIT**
TA for 15.774/15.780 The Analytics of Operations Management (MBA/Undergrad - 100/80 students). Fall 2024, 2023
- **University of Chile**
Lecturer of Modeling and Optimization (Undergrad - 100 students). Spring 2022
TA for IN770 Optimization Models and Algorithms (Graduate & PhD - 30 Students) Spring 2021, 2022
TA for IN790 Stochastic Models in Engineering Systems (Graduate & PhD - 30 Students) Fall 2021
TA for MA1001 Introduction to Calculus (Undergrad - 100 students). Spring 2016, 2017, 2018, 2019
TA for MA1102 Linear Algebra (Undergrad - 100 students). Fall 2018
TA for MA3402 Probability and Statistics (Undergrad - 100 students) Spring 2019
TA for MA2002 Advanced Calculus and Applications (Undergrad - 100 students) Fall 2019
TA for MA3401 Probability for Mathematicians (Undergrad - 30 students) Spring 2020
TA for MA3802 Measure Theory (Undergrad - 30 students) Fall 2020
TA for IN3272 Decision Making Under Uncertainty (Undergrad - 80 Students) Fall 2021
TA for IN6228 Game Theory (Undergrad - 20 Students) Spring 2022

PROFESSIONAL SERVICES

- MIT Operations Management Seminar student co-organizer Fall 2024

ADDITIONAL INFORMATION

Programming Skills: Python, R, SQL, MATLAB, Excel.

Languages: Spanish (Native), English.