Benjamín Barrientos

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Education

MASSACHUSSETS INSTITUTE OF TECHNOLOGY
Cambridge, MA
Ph.D in Operations Research
2022 – 2026

UNIVERSITY OF CHILE
Santiago, Chile
M.S. in Operations Management
2021 – 2022

UNIVERSITY OF CHILE
Santiago, Chile
B.S. in Mathematics
2015 – 2020

Experience

LVA INDICES
Santiago, Chile
Quantitative Research Intern
Jan 2019 – Mar 2019

Research and studies in the company's research area, focused on the development of predictive models for bond prices and the behavior of winners of the Salmon Award. The developed model was successfully implemented within the company.

VTR
Santiago, Chile
Quantitative Research Intern
Jan 2020 – Mar 2020

Implementation of a prediction model for the daily number of technicians assigned to fieldwork using simulations and time series analysis. This model aimed to optimize the allocation of resources and improve the efficiency of the fieldwork operations.

CENTER FOR MATHEMATICAL MODELING
Santiago, Chile
Research Assistant
Apr 2020 – Sep 2020

Research and work was conducted to better understand the COVID-19 disease using data analysis and machine learning methods. Different variables representative of each country's situation (structural, specific to the coronavirus, and controllable) were considered to predict the disease's fatality rate, number of infected, and deaths per million inhabitants. The findings were published on the website of the Center for Mathematical Modeling.

Teaching Experience

UNIVERSITY OF CHILE
Santiago, Chile
Teaching Assistant
2015 – 2022

- Introduction to Calculus, Probabilities and Statistics, Linear Algebra, Advanced Calculus and Applications, Probabilities for Mathematicians, Measure Theory, Decision Making Under Uncertainty, Optimization Models and Algorithms, Stochastic Models in Engineering Systems.

Lecturer
Mar 2022 – Aug 2022

- Optimization Models.
  I had the opportunity to teach optimization courses for one semester in the Industrial Department of the University of Chile.

Skills & Interests

Technical: Python, R, Julia, SQL and MATLAB.
Language: English and Spanish.