

Charles Thraves

address: Beauchef 851 Of. 624, Santiago, Chile
email: cthrones@dii.uchile.cl, website: <https://cthrones.com/>

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| Current Position | Department of Industrial Engineering, University of Chile Assistant Professor | 2017 - Present |
| Education | Massachusetts Institute of Technology Ph.D. in Operations Research | 2012 - 2017 |
| | University of Chile Master in Operations Management | 2010 - 2011 |
| | University of Chile Bachelor of Industrial Engineer | 2005 - 2011 |
| PhD Thesis | New Applications in Revenue Management Adviser: Georgia Perakis | 2017 |
| Master Thesis | Pricing Strategies with Strategic Consumers Adviser: José Rafael Correa | 2011 |
| Publications | Optimizing pit stop strategies in Formula 1 with dynamic programming and game theory Joint work with: Aguad, F. <i>European Journal of Operations Research</i> , 2024, INFORMS | |
| | Affinities and Complementarities of Methods and Information Sets in the Estimation of Prices in Real Estate Markets Joint work with: Bozanic-Leal, M., and Goic, M. <i>Journal of Forecasting</i> , 2024, Wiley | |
| | Analytics Saves Lives During the COVID-19 Crisis in Chile Joint work with: Basso, L., Goic, M., Olivares, M., Sauré, D., et al. <i>Inform Journal on Applied Analytics</i> , 2023, INFORMS | |
| | On the Optimization of Pit Stop Strategies via Dynamic Programming Joint work with: Carrasco, F. <i>Central European Journal of Operations Research</i> , 2022, Springer | |
| | On the Resource Allocation for Political Campaigns Joint work with: Morales, S. <i>Production and Operations Management</i> , 2021, Wiley | |
| | On a Variation of Two-part Tariff Pricing of Services: A Data-Driven Approach Joint work with: Perakis, G. <i>MSOM</i> , 2021, INFORMS | |
| | Consumer Surplus Under Demand Uncertainty Joint work with: Coehn, M., and Perakis, G. <i>Production and Operations Management</i> , 2021, Wiley | |

The effect of correlation and false negatives in pool testing strategies for COVID-19

Joint work with: Basso, J. L., Salinas, V., Saure, D., and Yankovic, N.
Health Care Management Science, 2021, Springer

Contingent Preannounced Pricing Policies with Strategic Consumers

Joint work with: Correa, J. R., and Montoya, R.
Operations Research, 2016, INFORMS

**Submitted
Papers/Working
Progress**

Parametric Estimation Under Diffuse Observations: An Application On Election Polls Working paper with Morales, S.

Estimating Checkout Lines with Transaction Data Working paper with Olivares, M., Guerra, R., and Carrasco, F.

Competition and Externalities in Green Technology Adoption

Working paper with Perakis, G.

Own Brand: Who benefits from it?

Working paper

Political choice estimation using demographic and voters' topic opinions

Working paper with Piña, C.

**Refereed
Conference
Proceedings**

Competition and Externalities in Green Technology Adoption

2015 Sustainable Operations SIG, MSOM Toronto
2014 MSOM Seattle

Contingent Preannounced Pricing Policies with Strategic Consumers

2012 MSOM New york

Invited Talks

On the Resource Allocation for Political Campaigns
Catholic University, Santiago, Chile

Spring 2020

On the Resource Allocation for Political Campaigns
University Adolfo Ibañez, Santiago, Chile

Spring 2019

**Academic
Achievements**

Best undergraduate teaching award in the Faculty of Physics and Mathematics 2024

Best full-time teaching award in the Department of Industrial Engineering 2024

Franz Edelman Award: "Analytics Saves Lives During the Covid Crisis in Chile"
2022

Best Student Paper at POMS: College of Supply Chain Management 2015

Ranked number one of the Master in Operations Management

Best teaching assistant of 2010 2011

Best teaching assistant of 2011 2012

Distinguish student during years 2005 - 2009

Gold medal in the national (Chilean) math olympics 2002

**Research
Internships**

University of Columbia

Winter 2011

Worked with Nicolás Stier-Moses on a problem in games and optimization. Also audited two courses.

Working Experience

Apple Summer 2015
Internship Cupertino, CA
Develop an optimization tool to improve the supply chain process resulting in savings of several millions of dollars each coming year. The tool is able to solve formulate, solve, and output on-the-fly the different business rules of the problem in procurement meetings.

CODELCO Spring 2011
Advance Excel Course Santiago, Chile
Teach as a private consultant the main tools of Microsoft Excel in ten classes, reviewing exercises to put in practice the wide range of functions, shortcuts, macros and other features that this software provides.

Falabella Summer 2009
Consultancy Santiago, Chile
Worked on a model to predict sales of every store in Chile based on econometric regressions with specific independent variables for each of the stores.

Bank Itaú Chile Summer 2009
Internship Santiago, Chile
Create a worksheet to value a derivative (Interest Rate Swap), considering the different financial calendars, interest rates and other specifications.

Teaching (University of Chile)

Undergraduate:
Probability [IN3141-1] Spring 2024
Probability [IN3141-1] Fall 2024
Probability [IN3141-1] Spring 2023
Probability [IN3141-1] Fall 2022
Probability [IN3141-1] Spring 2022
Probability [IN3141-1] Fall 2022
Probability [IN3141-1] Spring 2021
Probability [IN3141-1] Fall 2021
Operations Management I [IN4703-1] Spring 2020
Operations Management I [IN4703-2] Fall 2020
Operations Management I [IN4703-2] Spring 2019
Operations Management I [IN4703-2] Fall 2019
Operations Management I [IN4703-1] Fall 2018
Operations Management I [IN4703-1] Fall 2018
Operations Management II [IN4704-2] Spring 2011

Graduate:
Operations Management [IN75R-1/DPDIIGDE05-1] - MBA Spring 2023
Operations Management [IN75R-1/DPDIIGDE05-1] - MBA Spring 2022
Operations Management [IN75R-1] - MBA Spring 2021
Operations Management [IN75R-1/DPDIIGDE05-1] - MBA Spring 2020
Applied Methods for Data Analyses [IN5724-1] Fall 2019
Operations Management [IN75R-1] - MBA Spring 2019
Operations Management [IN75R-1/IN7A6-1] - MBA Spring 2018

Executive Education:
Optimization - Master in Business Analytics Spring 2024
Introduction to R and Python - Master in Business Analytics Spring 2023
Data Driven Decision Making - Certificate Spring 2021
Data Driven Decision Making - Certificate Spring 2020
Data Driven Decision Making - Certificate Spring 2019

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| Teaching (Washington University St. Louis) | <i>Graduate:</i> | |
| | Implementing Strategy through Global Operations [MGT560Q] - MBA | Spring 2022 |
| | <i>Undergraduate:</i> | |
| | Optimization Methods in Management Science | Spring 2015 |
| Assistant teacher (MIT) | <i>Graduate:</i> MBA | |
| | Introduction to Operations Management | Fall 2015 |
| | <i>Graduate:</i> LGO (Leaders for Global Operations) | |
| | System Optimization and Analysis | Summer 2016 |
| Assistant teacher (University of Chile) | <i>Graduate:</i> Executive-MBA | |
| | Excel Class | Spring 2016 |
| | <i>Undergraduate:</i> | |
| | Advance Excel Course | Fall 2012 |
| | Modeling and Optimization [IN3701] | Fall 2011 |
| | Operations Research [IN3702] | Fall 2010 |
| | Economics [IN2201-2] | Spring 2009 |
| | Operations Research [IN3702] | Spring 2009 |
| | Advance Excel Course | Spring 2009 |
| | Economics [IN2201-2] | Fall 2009 |
| | Operations Research [IN44A] | Fall 2009 |
| | <i>Graduate:</i> Master in Operations Management | |
| | Models and Algorithms of Optimization [IN77O-1] | Fall 2011 |
| Stochastic Models for Engineering Systems [IN79O-1] | Spring 2010 | |
| <i>Graduate:</i> Master in Management for Globalization | | |
| Operations Management [IN7A6-1] | Spring 2011 | |
| Operations Management [IN7A6-1] | Spring 2010 | |
| <i>Graduate:</i> MBA | | |
| Advance Excel Course | Fall 2010 | |
| Computer Skills | C, Java, Python, Julia, VBA, Matlab, R, Excel, AMPL, GAMS, SPSS, StatFit, Eviews, Arena | |
| Languages | Spanish | Native |
| | English | Advanced |
| Nationality | Chilean | |