

# DANIEL IGNACIO IRIARTE ARELLANO

Contact info.: (+569) 77759838 ◇ diriartearellano@gmail.com

## EXPERIENCE

---

### Data Analyst

May 2022 - December 2022

Optimization of waste-removal truck routes in Vitacura to reduce time and fuel costs using a data-based clustering and TSP approach.

### Start Up: Tripyeah

April 2021 - February 2022

### Optimization Engineer

Development and implementation of algorithms. Research for business development using data analysis. Construction of key indicators. Process automatization.

### iDux

January 2021 - February 2021

### Engineering Intern (Analytics Team)

Design, model and program solutions to solve a variety of business problematics using data analysis.

### Instituto de Sistemas Complejos de Ingeniería

Septiembre 2020 - January 2021

### Project Assistant

Automatization of vehicle routing for the home care unit at Hospital Sótero del Río.

## EDUCATION

---

### Masters in Operations Management

2021 - Present

### Thesist and Research Assistant

Thesis subject: Study, analysis and design of bayesian inference methods for vaccines clinical studies in Chile.

### Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile

2020 - Present

Masters in Operations Management.

### KTH Royal Institute of Technology - Stockholm, Sweden

Spring 2020

### Exchange Student

International working experience in multicultural work groups.

Project: design of a sustainable city using renewable energy based on indian city energy requirement data.

### Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile

2016 - Present

Industrial Civil Engineering.

### Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile

2016 - 2019

Bachelors in Industrial Engineering.

## TECHINICAL KNOWLEDGE

---

### Software

GitHub, SQL, HTML (basic), CSS (basic), Gurobi and other solvers, Latex, MS Office.

Python: Vast experience in diverse libraries of data analysis and data visualization such as: Pandas, Scikit-Learn, Numpy, Seaborn, Matplotlib, cuML, TensorFlow, pyTorch.

### Languages

**Spanish:** Native **English:** Advanced (TOEFL ITP certification)

## ACADEMIC EXPERIENCE

---

### Teacher Assistant

- **Teacher Assistant: Mathematical Modeling and Optimization**

Spring 2019, Spring 2020, Fall 2021, Fall 2022

- **Teacher Assistant: Operations Research**

Spring 2019, Fall 2021, Fall 2022

- **Teacher Assistant: Introduction to Classical Physics**

Fall 2018, Fall 2019

## SCHOLARSHIPS

---

### ANID

2022

### National Masters Scholarship

Awarded for outstanding academic achievement, teaching experience and research trajectory.

### Internal Scholarship, Masters in Operations Management - Universidad de Chile

2022

### Academic excellence scholarship

Awarded for outstanding academic achievement.

## DISTINCTIONS

---

### Finalist - Itaú Bank Data Science Challenge

Spring 2021

Competition objective: estimate the amount of runaway clients for the next month based on internal client data.

### Academic Excellence Award

2016, 2017, 2018, 2019, 2021

Facultad de Ciencias Físicas y Matemáticas de la Universidad de Chile.

## EXTRACURRICULAR ACTIVITIES

---

### University Swimming Team

2021 - Present

Swimming team - Universidad de Chile.

### Teaching Committee - CEIN

Spring 2020

Student Center - Industrial Engineering - U. de Chile.

### Impulso Project

Fall 2018

Project leader. Project looking to reduce recidivism using social skills workshops in a penitentiary of southern Santiago.

### Scout Manqueman

2010 - 2015

Scout Manqueman group member for 6 years. Learning experience in teamwork and leadership.