# **REIDMEN ARÓSTICA**

#### **Mathematical Engineer**



## **EXPERIENCE**

## Research & Thesis

# Universidad de Chile

Santiago, Chile

Employer: PhD.Axel Osses. Classification: Proactive 7.0/7.0

- It was generated a numerical model that describes *Lamb*-wave behavior from a novel Ultrasonic Method.
- Realistic bone simulations from  $\mu$ -CT images are done in NLHPC facilities.
- Novel extensions to viscoelastic mechanical behavior are proposed connected to experimental results.

#### Research Assistant

#### Pontificia Universidad Católica de Chile

December 2017 - January 2018

♀ Santiago, Chile

Employer: PhD. Daniel Hurtado. Classification: Independent 7.0/7.0

• There are studied methods to numerically simulate bone tissue under stress, using state-of-art library FEniCS.

#### Research Assistant

#### Center of Mathematical Modelling (CMM), Chile

December 2016 - January 2017

Santiago, Chile

Employer: PhD. Felipe Tobar. Classification: Productive at work. 6.0/7.0

• There is proposed an implementation of *Reinforcement Learning* to predict financial series under the Keras library.

## Laboratory Assistant

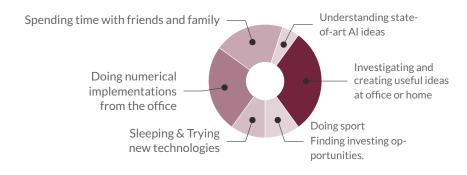
#### Universidad de Chile

Santiago, Chile

Employer: PhD. Rodrigo Assar. Classification: Productive, Enthusiast 7.0/7.0

• It is investigated state-of-art methods in bio-statistic for genetic counters of proteins.

# A DAY OF MY LIFE



# **EDUCATION**

# M2 Mathématiques Appliquées Paris Dauphine Université

September 2019 - Ongoing

Expected graduation on July 2020

## Mathematical Engineering and

# M.Sc.Eng. in Applied Mathematics Universidad de Chile

march 2013 - April 2019

Graduated with the highest distinction on both (6.9/7.0)

## MOST PROUD OF



#### Impact-driven Person

Expect my work to have profound impact on society.



### **Curiosity-driven Person**

Firsts adopters of new technologies during with interdisciplinary working teams.



#### Persistence & Loyalty

Despite hard moments, I showed willingness to advance progress during the Research Thesis/Project

# STRENGTHS & SKILLS

Hard-working (18/24) Persuasive

Motivator (Result-driven (Persistent

Curiosity-driven

Mathematical Modelling | Inverse Problems

Numerical Analysis Deep Learning (AI)

High Performance Computing

Python, MATLAB, Lash HTML, Offices Suites, C++, Docker



# **LANGUAGES**

Spanish (Native) English (C1) French (A1)



## **WORK**

#### Consultant

#### **Management Solutions**

Santiago, Chile

• Consultant of data analytics at a finance oriented firm, the main project was related to credit scoring.

# Hands-on Instructor

#### Universidad de Chile

## 15-17 January 2019

Santiago, Chile

Instructor at Conference: Inverse Problem Methods, Applications and Synergies (IPMAS)

#### Assistant & Advisor

#### Universidad de Chile

August 2018 - December 2018

Santiago, Chile

- Assistant at the Course: Inverse Problems and Control on Partial Differential Equations.
- Advisor at Calculus Course Project: Taller dos Relojes.

### **Assistant Professor**

#### Universidad de Chile

March 2018 - June 2018

Santiago, Chile

• Assistant at the Course: Numerical Methods in Partial Diferential Equations.

# **OTHERS**

### Pre-doctoral Scholarship

### Universidad Adolfo-Ibañes

December 2017

Viña del Mar, Chile

• Pre-doctoral School, Economic-based Courses and Facility visits.

#### M2 Scholarship

#### Université PSL

## September 2019 - June 2020

Paris, France

• France (2019) *Grant Master de d'excellence* from the Paris-Dauphine University (*Université PSL*).

#### **Prizes**

#### Universidad de Chile

- Santiago, Chile
- Chile (2017, 2018) Highlighted Student from the Mathematics Department, FCFM.
- Chile (2013) Best Student at High-School, (6.8/7.0).

## REFEREES

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