RODRIGO ZELADA

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EDUCATION

University of Chile 2013 - Present

Mathematical Engineering.

Master in Engineering Sciences, minor Applied Mathematics 2019 - Present

PROJECTS

Mathematical Model of the Dynamics of Red Tide

March 2019 - Present

My current project is work in my thesis, under the supervision of Carlos Conca and Jorge San Martín. I am designing and analyzing predictive mathematical models to understand the environmentally very damaging phenomena of the red tide in the South of Chile.

TECHNICAL STRENGTHS

Programming Languages	MATLAB (advanced), Python (intermediate), R (beginner).
Finite Element Software	FEniCS Project (intermediate), FreeFem++ (beginner)
Optimal Control Solver	ROCOP

Optimal Control Solver BOCOR Typesetting System LaTeX

WORK EXPERIENCE

Professional Internship I

June 2016

Treatment of images via interferometry. I worked with the astronomer Simón Cassasus (DAS).

Professional Internship II

June 2017

Computational algorithm for the Legendre-Fenchel conjugate. The teacher in charge was Abderrahim Hantoute.

Professional Internship III

June 2018

Study of Stokes and Navier-Stokes, validation of numerical algorithms. Under the supervision of Raúl Gormaz of the CMM (Center of Mathematical Modeling).

TEACHING

MA2002 - Advanced calculus Fall 2016

Test grader

MA2002 - Advanced calculus Spring 2016

Test grader

MA5602 - Non stationnary modeling

Fall 2019

Teacher's assistant

ACADEMIC ACHIEVEMENTS

Prominent student in the mathematics department.

2018

EXTRA-CIRRUCULAR

Cde! (Student Development Center)

2015-2018

I participated in a social group at University called Cde!, which consisted of doing volunteer work during the holidays and visiting regularly Sename's children.

- · Volunteer work in the city of San Clemente: we painted a rural school and put grass. Summer 2015 Responsible in charge: Nicolás Quezada Lezana.
- · Volunteer work in the commune of Colina: sustainable garden construction at Winter 2017 Fontt School.

Responsible in charge: Francisca Guzmán Aliste.

· Secretary 2017-2 / 2018-1

Sustainability Representative

2017

I was Sustainability Representative of my career the year 2017.