# GABRIEL
## RUDLOFF BARISON

## CONTACT INFO

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|---|---|
| **Webpage** | grudloff.github.io/about/ |
| **Address** | Barcelona, Spain |

## ABOUT ME

Data scientist with a strong foundation in electronic engineering and focus on machine learning research. Bachelor's and Master's degrees in Electronic Engineering. Master's focused on machine learning and advanced signal processing, with research in applying deep learning to fiber optic sensors. Solid understanding of deep learning, classical machine learning, and computer vision techniques. Curiosity and thirst for knowledge are my main drive. Analytical mindset, attention to detail, and obsession with solving complex problems.

## EXPERIENCE

### SOFTWARE DEVELOPER INTERSHIP
Jan. 2020 - Apr. 2020

*Inria* | *Lille, France*

- Development of an open source machine learning python package. Resolve issues and propose new features through pull requests.

### DEVELOPMENT ENGINEER INTERNSHIP
Jan. 2019 - Apr. 2019

*Kauel* | *Santiago, Chile*

- Web development, 3D reconstruction from images, AI R&D and the development of an IoT project.
- Main role on IoT project, implementing requirements and dealing directly with the client.

## EDUCATION

### B.S. IN ELECTRONIC ENGINEERING
2014-2020

*Universidad Técnica Federico Santa María* | *Valparaiso, Chile*
(Mention in computers, submention in telecomunications)

### M.S. IN ELECTRONIC ENGINEERING
2020-2023

*Universidad Técnica Federico Santa María* | *Valparaiso, Chile*
(Specialty in Telecommunications and Signal Processing)

- Application of artificial intelligence in the context of fiber optic sensors.
- Thesis topic: "Peak detection of spectrally-overlapped fibre Bragg gratings using an autoencoder convolutional neural network"

## ACHIEVEMENTS

**Awards**
- Academic Merit (2014-2017)
- 2nd place in FEUTFSM Environmental Ideas 2015

## PUBLICATIONS

**Articles**

**Gabriel Rudloff** and Marcelo A. Soto (2023). "Peak detection of spectrally-overlapped fibre Bragg gratings using an autoencoder convolutional neural network". In: *European Workshop on Optical Fibre Sensors (EWOFS 2023).* DOI: 10.1117/12.2679924.

## SKILLS

### Programming Languages

● ● ●     Python, C++, LaTeX

● ● ○     SQL, Bash, HTML

● ○ ○     Matlab, Assembly, Java, Verilog, Javascript

### Frameworks, Libraries & Technologies

● ● ●     Numpy, Pytorch, Pandas, Sklearn, Matplotlib

● ● ○     Git, Tensorflow, Pytest

● ○ ○     Altium Designer, Vrep

**Languages**
- Spanish (Native)
- English (Full professional proficiency)
- French (Basic)

**Hobbies**
- Guitar & piano
- Bouldering
- Biking
- Surfing