

# Francisco Tobar

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## Coding

C/C++ • Python • Ruby • R • Bash • SQL • JavaScript • PHP • HTML5

## Libraries/Frameworks

Ruby on Rails • Django • TensorFlow • PyTorch • Scikit-learn • Pandas

## IT Operations

GNU/Linux • Apache • Nginx • PostgreSQL • MariaDB

## RELEVANT EXPERIENCE

### Dlogistic, Valparaíso, Chile - *Software Development*

Mar 2018 - Jun 2018

- Developed and deployed a RoR web application for internal package/delivery men matching using smartphones as barcode scanners that reduced the daily package assignment process from 1-2 hrs to 30 min.

### U-Planner, Valparaíso, Chile - *Data Science Intern*

Jan 2018 - Jan 2018

- Developed machine learning algorithm in Python with scikit-learn for course enrollment prediction in educational institutions providing a competitive and quicker option to the previous forecast algorithm.

### GeoInnova, Santiago, Chile - *Data Science Intern*

Mar 2018 - Jun 2018

- Implemented of a quick K-neighbours algorithm for high dimension in C++
- Designed an efficient pipeline between Cuda DLLs and Electron Framework.

## RESEARCH

### Multi-OctConv: Reducing Memory Requirements in Image Generative

**Adversarial Networks** - *Francisco Tobar, claudio Torres, 2020 39th International Conference of the Chilean Computer Science Society (SCCC)*

Mar 2018 - Present

- Developed a modified convolutional layer in PyTorch that replaced the traditional convolutions reducing the memory usage on Generative Adversarial networks up to 40% without affecting the quality of the generated image.

## EDUCATION

Mar 2017 - Present **Master Degree in Computer Engineering**

*Universidad Técnica Federico Santa María, Valparaíso, Chile*

Mar 2013 - Aug 2019 **Bachelor Degree in informatics Engineering**

*Universidad Técnica Federico Santa María, Valparaíso, Chile*