

Mail: [constanza.fierro94@gmail.com](mailto:constanza.fierro94@gmail.com)  
 Phone: (+33) 651 900 428  
 Website: [cfierro94.github.io](https://cfierro94.github.io)

## EDUCATION

**UNIVERSITY OF CHILE**  
**COMPUTER SCIENCE ENGINEER**  
**(ENGINEERING DIPLOMA)**  
 Completed Jul 2019

Cum. Grade: 6.5/7.0 (GPA 4)  
 Years of studies: 6

**ECOLE CENTRALE MARSEILLE**  
**EXCHANGE**  
 Jul 2015 - Jul 2016 | France  
 General Engineering

## COURSEWORK

Algorithms and Theory  
 Probabilities and Statistics  
 Computational Intelligence  
 Data Mining:

- Participation on Santander Kaggle competition (1349th/1787). Carried complete knowledge discovery process.

### Probabilistic Robotics

- Development of an exploration algorithm. Frontier-based inspired using Visual SLAM. (ROS, C++)

Linear Algebra  
 Multivariate calculus  
 Software Engineering  
 Programming Languages  
 Operating Systems  
 Databases

## SKILLS

### PROGRAMMING

Advanced:

Python • C++ • Java

Intermediate:

Pytorch • Tensorflow • SQL

Matlab • Bash

Familiar:

Assembly • R • CSS/HTML

### LANGUAGE

Spanish: Native

English: Fluent

French: Excellent command

## OTHER HOBBIES

Handball player and occasional runner  
 Active member of Women at Google  
 Psychology and neuroscience enthusiast

## EXPERIENCE

### GOOGLE | SOFTWARE ENGINEER (YOUTUBE VIDEO CLASSIFICATION)

Oct 2019 – Present | Paris, France

- Part of the team developing Youtube classification platform for training, evaluating and governing classifiers.
- In charge of building and serving 3 different binary classification models for videos.
- Developed multiple evaluation analysis for our classifiers.
- Designed and implemented pipelines for automatic sampling, human labeling, training, and evaluation of classifiers.
- Developed weighted and importance random sampling.

#### 20% GOOGLE BRAIN SUMMARIZATION TEAM

- Defined and presented the state of the art for the data-to-text task.
- Open sourced 10 datasets with TFDS to be able to evaluate in all of them.

### FACEBOOK | SOFTWARE ENGINEER INTERN (IG GROWTH RANKING)

Jan 2019 – Mar 2019 | Menlo Park, California

- Added cached behaviour for server failures. Used A/B testing to experiment.
- Implemented counters and throttling for clients of the ranking server.
- Migrated features extraction to a general Facebook features store.
- Designed general framework for features extraction from different sources.

### GOOGLE | SOFTWARE ENGINEER INTERN (SEARCH CORE TEAM)

Jan 2018 – Apr 2018 | Mountain View, California

- Worked in anomaly detection on time series using Bayesian DLM.
- Improved the signal by incorporating cycles of different lengths to the model.
- Improved memory usage on the signal calculation.
- Trained and compared Tensorflow models with/without the new signal.

## RESEARCH

### ENGINEERING THESIS | PAPER AT ICLR 2020 (AI4AH WORKSHOP)

Predicting Unplanned Readmissions with Highly Unstructured Data

- Proposed and developed a deep learning model for predicting inpatient readmission.
- Used 10 years of data from a Chilean clinic that contained mainly free text.
- Obtained results comparable to the state of the art in the task.
- Presented the paper as it was selected for oral talk ([link](#)).

### UNDERGRAD RESEARCH | PAPER AT EMNLP 2017 (ARGUMENT MINING WORKSHOP)

200K+ Crowdsourced Political Arguments for a New Chilean Constitution

- Compared manual text classification to linear and neural network models.
- In charge of the development of the deep neural network (Deep Averaging Network).

## OTHER PROJECTS

### DEVELOPMENT OF APP WEB FOR SCIENCE FAIR

- Designed and developed algorithm to manage tours creation. (Considering: location, availability, duration, group size, etc.)

### VOLUNTEERING

- Grace Hopper 2020 scholarship reviewer.
- ICLR 2020 volunteer: dry run the online platform and assist attendees.
- Venkat Panchapakesan Google 2019 scholarship reviewer.

## AWARDS

2019	Honors	Graduated with the highest academic distinction
2013-2018	Honors	Dean's list
2017	Fellow	Latin-American AI Summer School (EVIC)
2015	11 <sup>nd</sup> /450	Ascenci Dev Cup (France) Finalist
2012	2 <sup>nd</sup> /90	High School Graduation position