Constanza Fierro

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EDUCATION

UNIVERSITY OF CHILE
Computer Science Engineer (Engineering Diploma)
Completed Jul 2019

Cum. Grade: 6.5/7.0 (GPA 4)
Dean's List (All Semesters)
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). Complete knowledge discovery process made. (Python, R)

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
Over 5000 lines:
Python • C++ • Java
Over 1000 lines:
Pytorch • Tensorflow • Matlab
MySQL • CSS/HTML • Scheme
Familiar:
Assembly • Bash • R

LANGUAGE
Spanish: Native
English: Fluent
French: Excellent command

OTHER HOBBIES

Former handball player at university
Active member of Women at Google
Active member of HOLA community at Google

EXPERIENCE

GOOGLE | Software Engineering (Youtube Classification)
Oct 2019 – Present | Paris, France
- Part of the team developing Youtube classification platform for training, evaluating and governing classifiers.
- In charge of building 2 different binary classification models for videos.

FACEBOOK | Software Engineering 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 stores.

GOOGLE | Software Engineering 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 architecture for predicting unplanned readmissions.
- Used 10 years of data from a Chilean clinic that contained a lot of free text.
- Obtained results comparable to the state of the art in this task.

UNDERGRAD RESEARCH | Paper at EMNLP 2017 (Argument Mining Workshop)
200K+ Crowdsourced Political Arguments for a New Chilean Constitution
- Worked with Prof Jorge Pérez and Mauricio Quezada on natural language classification tasks. (Python, Keras)
- Developed Deep Averaging Networks to classify political opinions.

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.

Encouraging women
- Founded non profit organization: "Niñas PRO".
- Created and participated in programming course for women students.

AWARDS

2017	Fellow	Latin-American AI Summer School (EVIC)
2015	$11^{nd}/450$	Ascenci Dev Cup (France) Finalist
2012	$2^{nd}/90$	High School Graduation position
2012	$4^{th}/14$	Robotics "Mine challenge" Universidad del Desarrollo