PATRICIO ALEGRE

CHILE

EMAIL
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SOCIALS
patricio-alegre-ai (LinkedIn)

SUMMARY

Curiosity-driven lifelong learner, with 5+ years of experience in Data Science, Machine Learning and Deep Learning.

Always looking for learning opportunities in Natural Language Processing (NLP). Experience working with Transformer models and the HuggingFace library.

SKILLS

- Relevant experience in building innovative custom solutions in NLP.
- Experience training deep learning models, CNN, RNN and Transformers.
- Hands-on experience with Pytorch, Sklearn, pandas and numpy.
- Always learning about new libraries for fun: Pytorch Lightning, Sentence-Transformers, Adapter-Transformers, Haystack, ML Flow and others.

EXPERIENCE

PROTERA BIOSCIENCES 01/2019 – present

Santiago, Chile *// Artificial Intelligence Engineer*

Change the world through the design of proteins using the power of Deep Learning.

OPTYTEK 05/2017 – 01/2019

Santiago, Chile *// Ran Optimization Engineer*

Aid in product & feature performance analysis, evaluation of new products & SW releases and third party product evaluation.

EDUCATION

UNIVERSIDAD TÉCNICA FEDERICO SANTA MARÍA 2016

Master of Science in Electronic Engineering

The objective of this program is to train graduates with a command in the state-of –the-art research with an ability to apply it in research and technological innovation.

UNIVERSITY OF TORONTO SCHOOL OF CONTINUING STUDIES 2020 – 2021

Artificial Intelligence Certificate

Machine Learning, Deep Learning, Intelligent Agents & Reinforcement Learning.

- Explore all modern branches of AI, from deep learning using neural nets to reinforcement learning.
- Train generalized predictive classification and regression models
- Understand the difference between various network architectures like CNN, RNN, transformer and generative algorithms
- use logical and probabilistic reasoning to make decisions with incomplete information

UNIVERSITY OF TORONTO SCHOOL OF CONTINUING STUDIES 2018 – 2019

Data Science Certificate

Foundations of Data Science, Statistics for Data Science, Big Data Management Systems & Tools and Machine Learning.

- Help organizations leverage the increasing variety and volume of data.
- Explore probability and descriptive statistics, cover data analysis from both a classical and contemporary viewpoint and learn to extract insight from datasets.
- Identify correlations and patterns in datasets, build more sophisticated predictive models using machine learning and deep learning software
- Hands-on experience using big data analysis tools (e.g. pySpark)

UDACITY 2018 – 2018

Nanodegree, Deep Learning, Machine Learning

This nano degree provides great foundation on deep learning techniques such as convolutional neural networks, recurrent neural networks and generative adversarial networks implemented in Tensorflow. As part of this program I have developed projects related to machine translation, image generation and image classification.

UNIVERSIDAD TÉCNICA FEDERICO SANTA MARÍA 2016

Civil Electronic Engineering, Telecommunications

Scientific and technological preparation accompanied by training in management and humanities, with a program combining a main and a complementary specialization, and elective courses.

LICENSES & CERTIFICATIONS

- MITx MicroMasters: Fundamentals of Statistics, Machine Learning with Python-From Linear Models to Deep Learning, Data Analysis in Social Science, Probability - The Science of Uncertainty and Data.
- Coursera: Deep Learning Specialization, Applied Data Science with Python, Machine Learning Specialization, Machine Learning.

HONORS & AWARDS

- Data Scientist: Issued by Becas Capital Humano - CORFO (Chilean governmental agency tasked with promoting economic growth) Jun 2019
- Incentive Program for Scientific Initiation (IPPC) for Masters and PhD students to encourage interest in scientific research. Jan 2014
- Scholarships for Masters in U.T.F.S.M. to encourage excellence students to continue Master course studies

PUBLICATIONS

Long Term Fade Margin for 90% Availability in Fixed Wireless Links With Diversity (IEEE · Oct 1, 2020). We propose a model that accurately characterizes first and second order link statistics. Spatial and frequency diversity measurements allowed us to also assess the effectiveness of the corresponding fade mitigation techniques. From them we conclude that the long-term fades appear to be consistent with time-varying multipath propagation, as opposed to shadowing.