Nicolás Fredes

22 norte 1125 I-301,
Viña del Mar, Chile
(569) 9899 1704
nico.fredes.franco@gmail.com
Github://nicolasfredesfranco
LinkedIn://nicolasfredesfranco
Twitter://nicofredesfranc

Nicolás Ignacio Fredes Franco

DATA SCIENTIST

EDUCATION

Federico Santa María Technical University

Valparaíso, Chile

B.S. in Electronic Engineering

GPA: 76%

M.S. in Electronic Engineering

GPA: 92%
Specialty: Machine Learning.
Thesis: "Protein functions prediction using Deep Learning."

SKILLS

PROGRAMMING LANGUAGES

• Python • SQL • C • C++
• Verilog • Latex • MATLAB

FRAMEWORKS

• PyTorch • TensorFlow • Keras
• OpenCV • Pandas

CLOUD

• Azure • GCP • AWS

OS

• Linux • OS X • Windows

CONCEPTS

• Machine Learning • IoT
• Computer Vision • NLP • DSP
• Functional Programming
•Object-Oriented Programming

LANGUAGES

Spanish Native Speaker

English Level CEFR C1

EXPERIENCE

WALMART Chile

Quilicura, Chile

Senior Data Scientist

Since November 2021

• Developed an autonomous algorithm (SQL & Python) for e-commerce products prices recommendation. Switching from a manual system with a latency of up to 6 months to daily price changes.
• Implemented Machine Learning (Python) models to evaluate the annual change in the product assortment, increasing the range of products considered by 200%.
• Optimized a code (SQL & Python) for competitors' promotions price recognition, making it 12 times faster and increasing its accuracy from 50% to 80%.

LAMNGEN Ltda.

Valparaíso, Chile

Artificial Intelligence Specialist

January 2020 - November 2021

• Accomplished a consultancy for the "Digital strategy for chemical products" of Virutex-Ilko company, creating a roadmap of the indispensable projects for its digital transformation towards the 4.0 industry.
• Developed an AI algorithm (Python) in IoT devices to replace the fault detection system of a Torre S.A. production line. Switching from faulty manual registration with 10-minute delays to an automated method of vision algorithms connected to a unified database with real-time data availability with a maximum delay of 1 second and 95% accuracy.

CCTVAL Technological Scientific Center

Valparaíso, Chile

IoT Team Developer

August - December 2019

• Implemented a human action detection Deep Learning algorithm (PyTorch & OpenCV), for actions such as smoking, walking and phoning. Achieving an accuracy of 98% on the TPS company's testing data .

AC3E Advanced Center for Electrical and Electronic Engineering

Valparaíso, Chile

Hardware & Software Engineer

January - February 2017

• Implemented a control algorithm in an Altys FPGA (C & Verilog) for a DAB converter for a light electric vehicle battery system.

PAPERS & WORKSHOPS

Journal Paper in IEEE ACCESS *DOI: 10.1109/ACCESS.2021.3094723*

• "**HGAN**: Hyperbolic Generative Adversarial Network". *July 2021*

Workshop LatinX in AI at NeurIPS *December 2019 in Vancouver, Canada*

• Expositor of the hyperbolic neural networks used in a GAN architecture.