Matias Cornejo Alarcón *Mayo 29, 1996*

matias.cornejo.a@ug.uchile.cl • +56 9 51287416 • • Santiago • CL

Experience

JetSmart — Santiago, RM, Chile

Pricing Analyst *April '24 – Present*

I leverage advanced data analytics and modeling techniques to optimize pricing models for ancillary products and services, maximizing revenue and enhancing competitiveness.

NotCo — Santiago, RM, Chile

Machine Learning Intern *October '18 – January '19*

I led a personal project that employed GAN deep learning models to explore and develop innovative solutions in the field of food technology.

Machine Learning Intern *September '19 – February '2020*

Responsible for creating a database by measuring the NIR (Near Infrared) spectrum of various foods. Conducted comprehensive statistical analyses to ensure the relevance of the data.

Education

University of Chile — Santiago, RM, Chile

Master of Data Science. *March 2024 – Present*

University of Chile — Santiago, RM, Chile

Civil Electrical Engineering - Computational Intelligence and Robotics. *March 2015 – December 2024*

Outstanding Student 2020

Linköping universitet — Linköping, Östergötland, Suecia

Bachelor of Engineering - Computer Science *January 2021 – June 2021*

Technical Skills

Python: Pandas, NumPy, Plotlt, Matplotlib, Seaborn, OpenCV

Machine Learning: Sklearn, Pytorch, AWS Sagemaker, Tensorflow, Keras, Scipy

Complementary: Java, C++, Matlab, AWS S3, AWS EC2, Power BI, SQL, Flask, Django, JavaScript, Excel, Git

Languages: Spanish, English

Oher Activities: Tennis, PSU (University Selection Test) and university preparation classes.

Highlighted Projects

Smart Lock using Facial Recognition as a Biometric System

Python, OpenCV, dlib, Arduino Uno, Cámara IP.

Creation of a smart lock using facial recognition as a biometric access system. Integration with an Arduino Uno and an IP camera for lock control.

Flavor Transfer (Adaptation) using a GAN Model

Python, WebScrapping, Pandas, Numpy, Tensorflow, matplotlib, Seaborn, Keras.

Development of a Generative Adversarial Network (GAN) model for flavor transfer between foods.

Simple and Accurate Dependency Parsing Using Bidirectional LSTM Feature Representations

Python, PyTorch, numpy, matplotlib.

Implementation of a dependency analysis model using bidirectional LSTM feature representations.

Object Detection and Recognition using tiny-YOLO on Android Phone

Android Studio, OpenCV, tiny-YOLO v3.

Development of a real-time object detection and recognition application using the tiny-YOLO model on an Android phone.

Frontend: Predictive Maintenance with Machine Learning

Python, PyTorch, Voilá, ipywidgets, HTML, CSS, JS.

Development of a frontend application for predictive maintenance using Machine Learning techniques. HTML, CSS, and JS were used for the implementation of the interactive application that displays predictive maintenance results based on Machine Learning models.

Recognition of Objects Instances based on CenterNet

Python, PyTorch, OpenCV, Docker, Git, Varios.

Implementation of a system for recognizing objects instances by modifying the CenterNet model. Python, PyTorch, OpenCV, Docker, Git, and various other technologies were used for data collection, processing, model training, and result evaluation.