



Félix Ernesto Charry Pastrana

DATA ANALYST · MASTER OF SCIENCE · PHYSICIST

Narvarte Oriente, Benito Juárez, PC 03010, Mexico City, Mexico · Willing to relocate? Yes!

☎ (+52 1) 55 8478 81 95 | ✉ charrypastranaernesto@gmail.com | 🌐 ernestocharry/portfolio | 📷 ernesto-charry-pastrana

"Many years later as he faced the firing squad, Colonel Aureliano Buendía was to remember that distant afternoon when his father took him to discover ice" — Gabriel García Márquez.

Profile

I am a data analyst and **Python** programmer with a background in **simulation** and **modelling**. I have acquired this experience throughout my working career (**Machine Learning** models: the probability of drop-out - Python, records in web pages - Python), academic (detector modelling - C++, simulation of nuclear reactions - FORTRAN, creation elemental composition - R) and numerous courses.

At present, **I am looking to expand my experience as a data analyst - Back End**, willing to learn new knowledge and provide the most reliable programming and statistical level. I am a committed and team worker (Graduated with Honors and Outstanding TeamWork, Ministry of Information Technologies and Communications of Colombia).

Experience

TheMadFox - Colombia

Remote Work

COLLABORATION IN THE DEVELOPMENT OF SOFTWARE AND DATA SCIENCE PROJECTS

April 2021 - May 2021

- Download data from API, merge it, filter it and create a end-point using Django
- Extract information from html files and create features
- Analyze and interpret the data and build-optimize the machine learning model

TheMadFox - Colombia

Remote Work

FREELANCE: TRANSLATE OF AUTONOMOUS ROUTINES BUILT IN R INTO PYTHON. THIS INCLUDES

November 2020 - January 2021

- Download and merge data using API.
- Extrapolate data.
- Create plot reports using Python - Plotly.

Data Science for All (DS4A) - Remington University (Colombia)

Remote Work

DATA ANALYST: PREDICT THE DROPOUT PROBABILITY OF A STUDENT USING DATA FROM 1996 TO 2020. PYTHON AND R.

August 2020 - November 2020

- Define and extract the dropout variable.
- Clean and merge the data.
- Define the Machine Learning Model (Random Forest).
- Locate the data and the model into AWS (EC2).
- Show and use the model in a Front End (Shiny - R).

UNAM

Mexico City, Mexico

SCIENCE PROGRAMMER: SIMULATION OF THE EFFICIENCY ϵ OF AN HPGE DETECTOR USING MONTECARLO (C++) AND EXPERIMENTAL DATA.

January 2018 - June 2018

Skills

Main Python, R, \LaTeX , C++, Git, Django

General FORTRAN, PostgreSQL

Languages Spanish (Native), English (Advanced level)

Education

Ministry of Information Technologies and Communications of Colombia and Correlation One

FALL 2020 DATA SCIENCE FOR ALL

Colombia

August 2020 - November 2020

- Graduated with Honors and Outstanding Teamwork.

UNAM (Universidad Nacional Autónoma de México)

MASTER OF SCIENCE DEGREE (PHYSICS), **HONORABLE MENTION**

Mexico City, Mexico

January.2017 - June.2019

- Thesis: Unification of gamma, beta and carbon-nitrogen spectrometry measurements for composition simulation and efficiency correction of aquatic sediments, R.

Universidad Nacional de Colombia

BACHELOR'S DEGREE IN PHYSICS

Bogota, Colombia

July.2010 - June.2016

- Thesis: Systematic analysis of nuclear reactions of alpha particles, FORTRAN.

E-courses

University of Michigan

coursera.org

SPECIALIZED PROGRAM: *Applied Data Science with Python*

- Introduction.
- **Machine Learning.**
- **Text Mining.**
- (In process) Plotting, Charting & Data Representation.
- (In process) Social Network Analysis.

University of Michigan

coursera.org

SPECIALIZED PROGRAM: *Web Applications for Everybody*

May, 2021

- Introduction to Structured Query Language (**SQL**).

IBM

coursera.org

SPECIALIZED PROGRAM: *Advanced Data Science with IBM*

May, 2021

- Fundamentals of Scalable Data Science. **PySpark.**
- (In process) Advanced Machine Learning and Signal Processing.

DeepLearning.AI

coursera.org

SPECIALIZED PROGRAM: *Deep Learning Specialization*

June, 2021

- (In process) Neural Networks and **Deep Learning.**

DeepLearning.AI

coursera.org

SPECIALIZED PROGRAM: *Machine Learning Engineering for Production (MLOps)*

June, 2021

- (In process) Notificaciones Introduction to Machine Learning in Production.

Investigation Groups

Global and Climate Change Group

Mexico City, Mexico

INSTITUTO DE CIENCIAS DEL MAR Y LIMNOLOGÍA - UNAM

January 2018 - December 2019

Isotopic Geochemistry and Radiochronology Laboratory

Sinaloa, Mexico

INSTITUTO DE CIENCIAS DEL MAR Y LIMNOLOGÍA, CAMPUS MAZATLAN - UNAM

June 2018 - August 2018

Research Stay

Tennessee, USA

OAK RIDGE NATIONAL LABORATORY

June 2016 - August 2016

Nuclear Physics Group

Bogota, Colombia

UNIVERSIDAD NACIONAL DE COLOMBIA

June 2014 - December 2016

Articles

- Systematic analysis of α elastic scattering with the Sao Paulo potencial, AIP Conference Proceedings 1753 (2016)
- Synthesis, structural and morphological characterization of the perovskite LaYbO_3 , J. Physics. Conf. Series. 687 012104 (2016)