Ernesto **Charry**

DATA ANALYST · PHYSICIST

Viaducto 38, 101, Benito Juárez, PC 03010, Mexico City, Mexico

☐ (+52 1) 55 8478 81 95 | ✉ charrypastranaernesto@gmail.com | ⌂ | ⊙ ernestocharry | in 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.

Education

UNAM (Universidad Nacional Autónoma de México)　　　　　　　　　　　　　　*Mexico City, Mexico*

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

BACHELOR'S DEGREE IN PHYSICS　　　　　　　　　　　　　　　　　　　　*July.2010 - June.2016*

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

Coursework

Ministry of Information Technologies and Communications of Colombia and Correlation One　　*Colombia*

FALL 2020 DATA SCIENCE FOR ALL　　　　　　　　　　　　　　　　　　　*August 2020 - November 2020*

- Graduated with Honors and Outstanding Teamwork.

e-courses

COURSERA.ORG

- Applied Data Science with Python: Introduction, Machine Learning and Text Mining. University of Michigan
- (In process) Applied Data Science with Python: Plotting, Charting & Data Representation and Social Network Analysis. University of Michigan
- (In Process) Fundamentals of Scalable Data Science. IBM

Skills

Main	Python (numpy, pandas, Scikit-Learn, NLTK, Data Cleaning), R (Shiny), LaTeX, C++
General	FORTRAN, PostgreSQL
Languages	Spanish (Native), English (Advanced level)

Experience

TheMadFox - Colombia　　　　　　　　　　　　　　　　　　　　　　*Remote Work*

FREELANCE: TRANSLATE OF AUTONOMOUS ROUTINES BUILT IN R INTO PYTHON. THIS INCLUDES　　*November 2020 - Present*

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

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*

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)