Christian Poveda-Ruiz

PHYSICIST · COMPUTER SCIENTIST

Education

Universidad de los Andes Bogotá, Colombia

M.Sc. in Systems and Computing Engineering 2016 - Present

Universidad de los Andes Bogotá, Colombia

B.S. IN MATHEMATICS 2012 - Present

Universidad de los Andes Bogotá, Colombia

B.S. IN PHYSICS 2011 - 2016

Experience _____

Universidad de los Andes Bogotá

GRADUATE ASSISTANT February 2018 - December 2018

Rappi inc. Bogotá

DATA SCIENTIST FOR OPERATIONS June 2017 - March 2018

- Co-designer of the A / B testing platform used on the CPGs search engine.
- · Introduced human search quality rating into the Quality Assurance process for the CPGs search engine.
- · Development of a predictive model to estimate the time of payment of a debt acquired by a domiciliary. Based on this, the concept of "reliable domiciliary" in operations was redefined.
- Development of a data pipeline to monitor the distribution of supply and demand in near real time.

Alianza CAOBA Bogotá

GRADUATE RESEARCH ASSISTANT July 2016 - August 2017

- Development of an interactive web application to allow monitoring of the state of the public transport service in Rio de Janeiro.
- · Study on traffic and mobility in order to characterize traffic accidents according to their causes in different areas of Bogotá.
- Study on taxes of urban delineation and characterization of taxpayers in order to detect anomalous declarations of constructions in Bogotá.

Publications_

Quantifying and controlling biases in estimates of dark matter halo concentration The Astrophysical Journal, 832, 2

C. N. POVEDA-RUIZ, J. E. FORERO-ROMERO, AND J. C. MUÑOZ-CUARTAS

November 30, 2016

Teaching_

2019	Teaching Assistant , Programming Paradigms	Uniandes
2018	Teaching Assistant, Functional Programming with Applications in Scala	Uniandes
2018	Professor , Discrete Mathematics and Logic	Uniandes
2016	Teaching Assistant , Computational Methods for Physicists	Uniandes
2016	Teaching Assistant , Computational Tools for Scientists	Uniandes
2015	Instructor, Integral Calculus with Differential Equations	Uniandes
2015	Teaching Assistant, Electromagnetism II	Uniandes
2014	Teaching Assistant , Computational Methods for Physicists	Uniandes
2013	Teaching Assistant , Computational Methods for Physicists	Uniandes
2011	Teaching Assistant , Algorithmics and Object Oriented Programming I	Uniandes

Events

2017	Assistant, Tendencias en Big Data y Analytics (Pontificia Universidad Javeriana)	Bogotá, Colombia
2016	Scolarship Assistant, XXIV Escuela de Verano en Física (Universidad Nacional Autónoma de México)	México, México
2016	Scolarship Assistant , First Mexican AstroCosmoStatistics School (Universidad de Guanajuato)	Guanajuato, México
2013	Oral Presentation, IV Congreso Colombiano de Astronomía (Universidad de Nariño)	Pasto, Colombia
2013	Assistant, Assistant at Workshop de Astronomía (Universidad de los Andes)	Bogotá, Colombia
2013	Assistant, Quinta Escuela de Física Matemática (Universidad de los Andes)	Bogotá, Colombia
2010	Assistant, Workshop on Physics and Technology at CERN (Universidad Nacional de Colombia)	Bogotá, Colombia

Programming



- Mainly for optimizing specific tasks in scientific programming.
- Experience writing Python modules over CPython.
- As a general purpose programming language.

- Experience writing concurrent applications using OTP.
- Experience using Plug for backend web development.
 - Some experience writing ETL tools.



• As a fast development programming language.

• Experience developing web applications using Echo and Gorilla/Mux.

Java

- · As a general purpose programming language.
- Some experience using Hadoop for data processing.
- Experience using ReactJS for frontend web development.

Javascript

- Developed interactive dashboards for near real-time monitoring.
- Basic knowledge of D3.js for Data visualization.
- As a general purpose programming language.

Python

- Experience using Numpy, Pandas and PySpark for data processing.
- Experience using Scikit-learn and Tensorflow for machine learning.
- Experience using Flask and Tornado for backend web development.
- For Systems Programming in several contexts.
- Experience developing basic web applications.

- **Rust** Experience writing embeddable modules for Python.
 - Done small contributions to Rust related projects like Servo, Cargo and Rust itself.
 - Mentor of the Rust track in exercism.io
 - Experience using Git for VCS.
 - Experience using Docker to deploy microservices and other applications.
 - Experience using Redis for real-time data processing.

- Others Experience using PostgreSQL.
 - Experience using MongoDB including its geospatial features.
 - Experience using InfluxDB and connecting it with Grafana for time series analytics.
 - Proud Linux user since 2010.