

Christian Poveda-Ruiz

PHYSICIST · COMPUTER SCIENTIST

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Education

Universidad de los Andes

M.Sc. IN SYSTEMS AND COMPUTING ENGINEERING

Bogotá, Colombia

2016 - 2019

Universidad de los Andes

B.S. IN MATHEMATICS

Bogotá, Colombia

2012 - Present

Universidad de los Andes

B.S. IN PHYSICS

Bogotá, Colombia

2011 - 2016

Experience

Fermi National Accelerator Laboratory

CMS SITE SUPPORT OPERATOR

Batavia, Illinois, United States

June 2018 - Present

- Responsible for monitoring all the services of the CMS distributed computing infrastructure to guarantee full coverage during the US time zone.

Universidad de los Andes

GRADUATE ASSISTANT

Bogotá, Colombia

February 2018 - December 2018

- In charge of one section and two laboratories of the undergraduate course in discrete mathematics and logic.

Rappi inc.

DATA SCIENTIST

Bogotá, Colombia

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

GRADUATE RESEARCH ASSISTANT

Bogotá, Colombia

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

Events

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

Programming

C	<ul style="list-style-type: none">• Mainly for optimizing specific tasks in scientific programming.• Experience writing Python modules over CPython.
Elixir	<ul style="list-style-type: none">• As a general purpose programming language.• Experience writing concurrent applications using OTP.• Experience using Plug for backend web development.• Some experience writing ETL tools.
Go	<ul style="list-style-type: none">• As a fast development programming language.• Experience developing web applications using Echo and Gorilla/Mux.
Java	<ul style="list-style-type: none">• As a general purpose programming language.• Some experience using Hadoop for data processing.
Javascript	<ul style="list-style-type: none">• Experience using ReactJS for frontend web development.• Developed interactive dashboards for near real-time monitoring.• Basic knowledge of D3.js for Data visualization.
Python	<ul style="list-style-type: none">• As a general purpose programming language.• Experience using Numpy, Pandas and PySpark for data processing.• Experience using Scikit-learn and Tensorflow to write and train machine learning models.• Experience using Flask and Tornado for backend web development.
Rust	<ul style="list-style-type: none">• For Systems Programming in several contexts.• Experience developing basic web applications.• Experience using Rust's FFI to write Python modules.• Done small contributions to Rust related projects like Servo, Cargo, Miri and Rust itself.
Others	<ul style="list-style-type: none">• Experience using Git for VCS.• Experience using Docker to deploy microservices and other applications.• Experience using Redis for real-time data processing.• 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.