Nicolás Jolaos Calero Villacís

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I am a physics student at Escuela Politécnica Nacional (EPN) University, where I have had the opportunity to develop my commitment, dedication, and skills in both theoretical and experimental techniques.

SKILLS

- English
- Python
- C++
- Wolfram Mathematica
- Gnuplot

EDUCATION

9th semester Physics Student

Escuela Politécnica Nacional (EPN)

EXPERIENCE

- Radiation – Matter Interaction Laboratory (2023)

I am currently working on analyzing the guiding effect of electrons interacting with dielectric materials.

- Condensed Matter Laboratory (2022)

I worked with colleagues to produce graphene in dispersion through chemical exfoliation and analyzed it using UV-VIS microscopes and AFM devices.

- “La poli visita el museo” Project (2021)

I worked on teaching employees from an interactive science museum (MIC) in Quito about Newtonian mechanics. Additionally, I created simulations in Wolfram Mathematica about experiments presented in the museum.

EXTRACURRICULAR ACTIVITIES

Theoretical Physics/ Summer School, Utrecht University

(21/08/2023 - 25/08/2023)

With financial support from Escuela Politécnica Nacional University, I successfully completed a course offered by Utrecht University in Netherlands and I earned 1.5 ECTS.

Use of electrometer with model B2985B/ High resistance Meter, 0.01fA and accesories, KEYSIGHT TECHNOLOGIES

(20/01/2023)

I successfully completed a course offered by members of "Complementos electrónicos S.A" and KEYSIGHT TECHNOLOGIES.

Beyond General Relativity, EPN and Universidad de Barcelona

(01/2023)

I successfully completed a course offered by Dr. Pablo Bueno. It was an introduction to General Relativity and modern gravitational theories.

XIX Bolivian course on complex systems, UNIVERSIDAD MAYOR DE SAN ANDRES AND UNIVERSIDAD TÉCNICA DE ORURO

(22/11/2021 - 24/11/2021)

I received a participation certificate. The central topic of the course was bifurcation theory.

Python Data Structures, University of Michigan

(01/11/2021)

I successfully completed a course offered on the platform "Coursera" for learning Python bases.

Introduction to the scientific programming with free software, GREAT SOCIETIES

(08/05/2021 - 29/05/2021)

I successfully completed a course offered online for learning Linux and Fortran bases.

Programming for everybody (Getting Started with Python), University of Michigan *(09/10/2020)*

I successfully completed a course offered on the platform “Coursera” for learning Python bases.

Mobil application for improving the mobility in Ecuador, EPN and Universidad Saleciana

(05/02/2020 - 07/02/2020)

I collaborated in the development of an application for detecting vehicles that exceed the speed limit imposed by Ecuadorian law.

EXTRAS

Extra subject • Introduction to General Relativity - EPN

(2023)

Taking this course gave me an introduction to Einstein's theory of General Relativity.

Member • Physics association - EPN

(2021) - (2022)

Participating in different activities in this association helped me develop my communication abilities and gain practice with social media management.

Academic excellence scholarship • EPN

(2018)

I received a scholarship for my academic achievements.

Various achievements in high school • Santa Maria Eufrasia

(2017)

I received recognition for my participation in a literature contest, my academic achievements, and my grade in the "Ser Bachiller 2017" evaluation.