

Juan Sebastián Barbosa

☎ 316 794 6510 • ✉ jsbarbosacoy@hotmail.com

🌐 www.github.com/jsbarbosa

Candidate to the bachelor degree of Physics and Chemistry with several years of experience as a teaching assistant of courses in Physics and Computational Methods. Skills in identifying and solving problems in multiple areas of knowledge. Motivated by acquiring new knowledge and developing or improving tools that generate positive impact on all types of users. Passionate about the development of knowledge in the world of programming and its application in different areas of research and industry. Ability to work under pressure, within multidisciplinary teams, with leadership skills in the implementation and development of ideas and the subsequent visualization of results.

Education

Academic training.....

- **Universidad de los Andes** **Colombia**
Physics student, 4.01/5.00 *2013–Present*
- **Universidad de los Andes** **Colombia**
Chemistry student, 4.01/5.00 *2014–Present*

Work experience

Academic.....

- **Universidad de los Andes, Centro de Microscopía** **(Microscopy center)**
Research assistant *January 2018–Present*
<https://investigaciones.uniandes.edu.co/es/microscopia/>
 - Administrative tasks: generation of quotes and user service
 - Laboratory assistant: management of the Confocal Laser Scanning Microscope, and fluorescence microscopes
 - Analysis of microscopy images
 - Developer of the software for the centralization of user requests (Microbill, 🐞/microbill, [Python](#))
 - Developer of the software for the data extraction of the Atomic Force Microscope (Igor Extractor, 🐞/SPM, [Python](#))
- **Universidad de los Andes, Departamento de Física** **(Physics Department, Computational methods)**
Teaching assistant of Métodos Computacionales *August 2016–December 2017*
 - Proposal of exercises and workshops
 - Development of the libraries: [astrohut](#) (🐞/astrohut, [Python](#)), [rippleTank](#) (🐞/rippleTank, [Python](#)) and a series of computer demonstration experiments <https://github.com/ComputoCienciasUniandes/Demonstrations>
- **Universidad de los Andes, Departamento de Física** **(Physics Department, Physics 1)**
Teaching assistant of Física I *August 2015–May 2016*
 - Development of methodologies that allow tracking the failures or progress of students
- **Universidad de los Andes, Departamento de Física** **(Physics Department, Astrobiology)**
Teaching assistant of Astrobiología *January 2015–May 2015*
 - Enriching and fundamental experience for the formation and the discovery of potential and interest in the field of teaching and the search for knowledge

Industrial.....

○ Tausand Electronics

Software Developer

January 2017–Present

Tausand is a scientific instrumentation development company. <https://www.tausand.com/>

- Currently responsible for developing the software Abacus ([Python](#)), which allows to use the coincidence counter that bears the same name
- Microcontroller programmer for various applications of the company

Actividades extracurriculares

○ Sympy

Colaborador, 1/822 coautores

Present

<https://github.com/sympy/sympy/blob/master/AUTHORS>

- Colaborador ocasional en el desarrollo de la librería [SymPy](#) para el cálculo simbólico en [Python](#)

○ Machine Learning for Quantum Matter and Technology

Décima Escuela de Física Matemática

Participante

Mayo 27-31 2019

https://matematicas.uniandes.edu.co/~cursillo_gr/escuela2019/index.php

○ Expociencia, Uniandes en Corferias

Expositor

Octubre 29-31 2018

<https://ingenieria.uniandes.edu.co/Paginas/Noticias.aspx?nid=429>

<https://medicina.uniandes.edu.co/index.php/es/facultad/noticias/448-expociencia-2018>

- Divulgador de ciencia para el público asistente
- Presentador de experimentos demostrativos con microscopios del Centro de Microscopía de la Universidad de los Andes

○ Python Bootcamp Uniandes, Universidad de los Andes

Organizador

Abril 29-30 2017

<https://pythonbootcampuniandes.github.io>

- Desarrollo y presentación de la soluciones a los ejercicios propuestos durante los talleres

○ 56 proyectos en GitHub

Generador de contenido y entusiasta opensource

Julio 2016–Present

<https://github.com/jsbarbosa>


- Creyente de la comunidad opensource. En parte soy, gracias a aquellos que divulgaron sus proyectos, y me permitieron aprender de ellos. Razón por la cual publico mis proyectos de tiempo libre, con la esperanza de retribuir un poco la generosidad de la comunidad que tanto me ha dado
- **Usuario frecuente de:** Jupyter, NumPy, Matplotlib, SciPy, SymPy, Pandas y PyQt. **Con frecuencia media y baja:** Pillow, scikit-image, scikit-learn, Django

Habilidades

○ Programación:

- **Avanzado:** C, Python, \LaTeX , y Bash
- **Intermedio:** Java

○ Comunicación: Inglés fluído. Certificado de IELTS (7.0/9.0).

⁰  hace referencia a <https://github.com/jsbarbosa>