

#### PERSONAL DETAILS

Nationality: Brazilian City: Paris

#### AWARDS

- Bourse internationalle d'excellence Télécom Paris Silver Model in the Nations
- -Silver Medal in the National Science Olympiad and Physics Olympiad
- -Honorable Mention in National Chemestry Olympiad

#### SKILLS

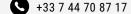
- -Artificial Intelligence
- -Physics Instrumentation
- -Python, SQL, C, SQL
- -TensorFlow, Keras, Cuda
- -Pytorch, SickitLearn
- -Etching, Cryogenics

#### LANGUAGE

- -Portuguese → Native
- -English → Adavenced
- -French → Advanced
- -Spanish → Intermediate

#### CONTACT





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github.com/giovanni-br

# GIOVANNI BENEDETTI DA ROSA

Data Science and Artificial Intelligence Student

# PROFESSIONAL GOALS

My journey has equipped me with a solid foundation in math, physics engineering, quantum chemistry, artificial intelligence, and imaging technology. I am passionate about applying this diverse expertise in both specialized and interdisciplinary projects that integrate these fields.

## EXPERIENCE

## Google Summer of Code QC-Devs

June -August 2024

Quantum chemistry developer in a software tool designed to generate 0, 1, and 2 electron integrals for various quantum models; Creation of user-friendly APIs, generalizing the module to all type of atoms, enhancing the versatility of the simulations.

## **BdG-Machine Learning**

February 2022 - March 2023

Optimization in more than 2 times of the computational time of superconductivity simulations using the Bogoliubov-de Gennes (BdG) and Machine Learning(ML) methods.

#### Quantum Solids Laboratory

September 2021 - September 2022

Devellopment of a new equippement for corrosion of probes sensors for AFM(Atomic Force Microscopy) and MFM(Magnetic Force Microscopy) cryogenic modes, using embedded systems.

## Marketing and Consumption Research Lab

March 2021 - August 2021

Machine Learning(LSTM) and econometrics methods for energy Time Series predictions based on satellite night-time data; Data extraction with Google Trends.

#### EDUCATION

# Institut Polytechnique de Paris - École Polytechnique

2024 - 2025

2023 - 2025

Msc Degree(M2) in Data Science: Statistics and Applied Math

#### Institut Polytechnique de Paris - Télécom Paris

MEng Deegree with focus on Artificial Intelligence and Image Processing

# Federal University of Rio Grande do Sul

2020 - Present

Bachelor in Engineering Physics

# **PROJECTS**

# Academic Technology Center (CTA)

A center for the development of open and free technologies: organization and workshops; development of an audio-descriptive box for the visually impaired.

# **Neural Networks for Artistic Style Transfer**

Applied convolutional neural networks to transfer artistic styles from renowned artworks to photographic images, preserving the original color integrity of the content.

## **Dermoscopic Images Classifier**

Classifier of skin lesion in 8 different types of disease using images using Machine Learning and Deep learning(Resnet) techniques.