



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

Development of a new equipment for corrosion of probes sensors for AFM(Atomic Force Microscopy) and MFM(Magnetic Force Microscopy) cryogenic modes, using embeded 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

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

Institut Polytechnique de Paris - Télécom Paris

2023 -2025

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.

PERSONAL DETAILS

Nationality: Brazilian
City: Paris

AWARDS

- Bourse internationale d'excellence Télécom Paris
- Silver Medal in the National Science Olympiad and Physics Olympiad
- Honorable Mention in National Chemistry 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

 giovannibenedettidarosa@gmail.com

 +33 7 44 70 87 17

 [linkedin.com/in/giovannibenedettidarosa](https://www.linkedin.com/in/giovannibenedettidarosa)

 github.com/giovanni-br