


# NATÁLIA CAPRA FERRAZZO

 LinkedIn —  GitHub —  Portfolio —  Credly

Paris - France

## ABOUT

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I am an Engineering Physicist specializing in Quantum Information and Quantum Computing at Sorbonne University, with experience in application development from my previous role at IBM. I am particularly interested in exploring quantum algorithms and optimization techniques, with a focus on quantum information theory, to advance the understanding and practical applications of quantum computing in solving complex computational problems.

## EDUCATION

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### Sorbonne University

Master's Degree in Computer Science - Quantum Information

Paris, France

Sept. 2023 – Jun. 2026



### Federal University of Rio Grande do Sul

Bachelor's Degree in Engineering Physics

Porto Alegre, Brazil

Feb. 2016 – Nov. 2022

*Thesis: Grover's Search Algorithm: Comparative study of the performance of quantum hardware made available by IBM, Microsoft, and Amazon.*

## EXTRACURRICULAR ACTIVITIES

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### 4EU+

Quantum Information and Quantum Many-Body Theory Summer School

Jun. 2024

University of Copenhagen, DN

[Course page](#)



### THE CODING SCHOOL

Introduction to Quantum Computing with IBM Quantum

Apr. 2023

Remote



### UNIGOU Internship

[Paper](#): Solving the Traveling Salesman Problem with IBM Quantum

Feb. 2022

Remote

[Course page](#)

## EXPERIENCE

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### IBM

Aug. 2021 – Jul. 2023

#### *Application Developer - Full Stack*

- Collaborated to develop and maintain backend services using Java and microservices architecture, ensuring modularity, scalability, and high performance for a banking investment portfolio application.
- Participated in designing and building the frontend using Angular to create a responsive and user-friendly interface for a mobile application that enabled clients to view, analyze, and manage their investment portfolios efficiently.
- Worked with QA team, assisting with testing by writing and reviewing test cases, performing code reviews, and ensuring that features met functional and performance standards.



### Cadastra

Nov. 2020 – Aug. 2021

#### *Data Scientist*

- Assisted in data gathering, analysis, and visualization using Python and Google Analytics to measure results, draft daily reports, and generate insights for marketing strategies and business goals.
- Applied machine learning models and clustering techniques to forecast sales and segment customers, enabling the CRM team to personalize communication effectively.
- Collaborated with the team to develop a tool for verifying the legitimacy of affiliate assignment sales and implemented a cross-selling strategy for a travel company.

## HIGHLIGHTED CERTIFICATIONS

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IBM Certified Associate Developer  
Quantum Computation using Qiskit



IBM Quantum Challenge  
2024 Achievement



Qiskit Global Summer School 2022  
Quantum Excellence



IBM Data Science  
Professional Certificate



Qiskit Advocate



IBM Quantum Challenge Fall  
2022 Achievement - Advanced



IBM Quantum Spring Challenge  
2022 Achievement



Nanodegree Program  
AWS Machine Learning

To check other achievements, please visit my [Credly page](#).

## LANGUAGES & SKILLS

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**Languages:** Portuguese (Native) · English (C2) · Spanish (B1) · French (A2)

**Skills:** Quantum Computing · Machine Learning · Data Science · Python · SciPy · NumPy · Pandas · Git · Qiskit SDK · Watson Studio · Jupyter Notebook/Lab · Postman · Docker · Agile Methodology · Javascript · Node.js · SQL · ETL · Typescript · Angular · JAVA · OOP · HTML · CSS

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