Leonardo C. Rossato - Quantum Computing & Econophysics

leo.c.rossato@gmail.com +55 (55) 981040084 https://github.com/LeonardoCamargoRossato

ACADEMIC HISTORY

Federal University Of Rio Grande do Sul (UFRGS), Brazil 2022/2 - 2025/2
Physics, PhD Degree (expect)

Federal University Of Santa Maria (UFSM), Brazil 2020/2 - 2022/1
Physics, Bachelor's Degree

EXPERIENCE

Co-founder Quantum Computing Academic League (LACQ Feynman) (2024/1 - Present):

- Responsible for teaching the ongoing biweekly Introduction to Quantum Computing course for a class of 30 to 40 students, focusing on algebra, mathematics, and Qiskit programming (UFRGS).
- Development of educational apps for quantum computing and communication. Open Source Beta version was launched at Data Science Summit 2024, where we had support from IEP (Instituto de Engenharia do Paraná) and other relevant companies in the market. (journalistic article link)
- Development of a collaborative network of projects with prominent companies in the field of quantum technologies, such as Dobslit, MultiCortex, among others. This network also includes my Personal Course Platform, and other new institutions that cannot yet be disclosed.

Econophysics (Data Science) Laboratory, UFRGS (2022/2 - Present):

- PhD research on Mining, Engineering, and Data Analysis of Socioeconomic Indicators in USA, Brazil and the Americas. Presented at several national and international conferences and my thesis was selected in a competition organized by the Young Scholars Initiative (YSI), and I was one of seven researchers chosen worldwide to receive a scholarship and present my work at the Conference on Complex Systems (CCS). I was the only Brazilian selected, standing out among researchers from Russia, Europe, and Latin America. This resulting in a publication by EPJ-B (DOI Paper link).

Statistical Mechanics Laboratory at UFSM (2020/2 - 2022/1):

- Optimized execution efficiency by 50% of the time for a mathematical algorithm applying probability theory to network structure, related to the best national PhD thesis in the area. This led to the publication of an international article in Physica A. (DOI Paper link)

COMPLEMENTARY ACADEMIC HISTORY

- Excellent academic performance. Over the past three years, I have received an "A" grade in all courses taken in the program, with only one exception in Electromagnetic Theory during my PhD in Physics at UFRGS, in which I earned a "B" but was the only student who managed to pass the course.
- Completed half of the undergraduate courses in Mathematics and Chemical Engineering at UFSM. And, many undergraduate courses in Computer Science e Statistics at several federal universities.
- Taught several courses, mini-courses, and workshops over the past years in different areas of the exact sciences, ranging from calculus, algebra, statistics, and data analysis to "How to Learn to Study?". Some examples include: mini-course about Calculus and Derivations for graduate level, in National Math Conference in 2023, at UFSM. And several classes on Advanced Computational Methods course in Physics for undergraduates at UFRGS in 2023. (Github Link) (Youtube Course)