

Iara Cristina Mescua Castro

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21-year-old student at FGV-RJ, currently in my first year of my master's degree, with a great interest in transdisciplinary projects and working in the areas of mathematical modeling and computer science.

Education

Master of Applied Mathematics and Data Science GETÚLIO VARGAS FOUNDATION (FGV)

Rio de Janeiro, Brazil

2025 - 2026

Coursework: Biostatistics | Causality | Computer Vision | Deep Learning | Mathematical Biology

Average Concept: A

Bachelor of Applied Mathematics GETÚLIO VARGAS FOUNDATION (FGV)

Rio de Janeiro, Brazil

2021-2024

Thesis: Analysis of Spatial Acessibility to Breast Cancer Treatment in Brazil: Application of the 2SFCA Model for Mapping Oncological Demand

Course: Mathematical, Physical and Biological Modeling | Stochastic Processes | Optimization | ML | Statistical Inference

GPA: 8.5/10

Experience

Money Laundering Prevention and Combating Terrorism Intern BANK OF COMMUNICATIONS (BOCOM BBM)

Rio de Janeiro, Brazil

09/2023 - 03/2024

- Improved client transaction monitoring by automating alert triggers based on customized rules (e.g., daily amount thresholds, number of counterparties, frequency of transactions).
- Automated compliance routines, such as including web scraping for negative news searches on individuals using targeted keywords, Integrated Idwall API for optimized streamlined client background checks (individuals and companies) and automated monthly database generation and maintenance for reporting.
- Created templates for semi-automated contract generation in Word, reducing manual workload.

Extracurricular Activities

12/2025 - Current **Community Service Volunteer**, Corrente Pelo Bem

11/2025 **Volunteer Data Analysis Mentor**, {Reprograma}

07/2024 - 12/2024 **Marketing Analyst**, Sociedade das Artes da FGV

04/2023 - 03/2024 **Pedagogic Analyst**, Amplia FGV

Achievements

2025-2027 **Master's Scholarship (PIBPG)**, National Council for Scientific and Technological Development (CNPq)

2023-2024 **Undergraduate Research Scholarship (PIBIC)**, National Council for Scientific and Technological Development

2020 **Honorable Mention at National Science Olympiad (ONC)**

2019 **Honorable Mention at National Mathematics Olympiad for Public and Private Schools (OBMEP)**

2017 **B2 Proficiency in English**, Cambridge University

2016 **B1 Proficiency in English**, Cambridge University

Skills

Programming Python | R | VBA | Matlab/Scilab | Julia

Office Package Excel | Power BI | Power Query | Power Point | Word | Teams

Softwares Tableau | Notion | Sagemath | Jupyter

Technologies Data Analysis | APIs | Web Scrapping | AI Governance | IoT | UX/UI Design

Doc. Markup LaTeX | Markdown | HTML | Typst

Languages Portuguese (Native) | English (Advanced) | Spanish (Advanced)

Soft Skills Flexibility | Organization | Troubleshooting | Teamwork