

# 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 Aecessibility 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	<b>Community Service Volunteer</b> , Corrente Pelo Bem
11/2025	<b>Volunteer Data Analysis Mentor</b> , {Reprograma}
07/2024 - 12/2024	<b>Marketing Analyst</b> , Sociedade das Artes da FGV
04/2023 - 03/2024	<b>Pedagogic Analyst</b> , Amplia FGV

## Achievements

2025-2027	<b>Master's Scholarship (PIBPG)</b> , National Council for Scientific and Technological Development (CNPq)
2023-2024	<b>Undergraduate Research Scholarship (PIBIC)</b> , National Council for Scientific and Technological Development
2020	<b>Honorable Mention at National Science Olympiad (ONC)</b>
2019	<b>Honorable Mention at National Mathematics Olympiad for Public and Private Schools (OBMEP)</b>
2017	<b>B2 Proeficiency in English</b> , Cambridge University
2016	<b>B1 Proeficiency in English</b> , Cambridge University

## Skills

<b>Programming</b>	Python   R   VBA   Matlab/Scilab   Julia
<b>Office Package</b>	Excel   Power BI   Power Query   Power Point   Word   Teams
<b>Softwares</b>	Tableau   Notion   Sagemath   Jupyter
<b>Technologies</b>	Data Analysis   APIs   Web Scrapping   AI Governance   IoT   UX/UI Design
<b>Doc. Markup</b>	LaTeX   Markdown   HTML   Typst
<b>Languages</b>	Portuguese (Native)   English (Advanced)   Spanish (Advanced)
<b>Soft Skills</b>	Flexibility   Organization   Troubleshooting   Teamwork