# Marília Melo Favalesso

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## **Technical Skills**

Languages: Python, R, SQL

Libraries: Matplotlib, NumPy, Pandas, Plotly, Scikit-learn, Seaborn, Tidymodels, Tidyverse

Other tools: AWS, Azure DevOps, Docker, Git, GitHub, Google Cloud, Hadoop, Linux, MLFlow, Quarto

Keywords: Machine Learning, Statistical Analysis, Big Data, CI/CD, Versioning, Data Preparation and Visualization, GIS

# **Experience**

#### Data Scientist | Hospital Israelita Albert Einstein

Remote (Brazil)

Big Data

2022 - Atual

- Developed and deployed predictive models for clinical outcomes, improving risk stratification, personalizing treatment, and optimizing resource allocation.
- Developed strategic indicators to identify irregularities within the Brazilian Unified Health System. Applied scikit-learn algorithms (Isolation Forest) and statistical techniques (Z-score, IQR) for outlier detection.
- Spearheaded professional development and knowledge-sharing initiatives, including research and publication efforts, to elevate the team's scientific expertise.

#### Biostatistician | Western Paraná State University

Cascavel (Brazil)

What is Your Question?

2016 - 2018

- Co-created the project "What's Your Question?" in collaboration with Dr. Ana Tereza Bittencourt Guimarães, aiming to provide biostatistics consulting.
- Applied advanced data analysis methods, including GLM, GLMM, Multinomial Regression, CAR and SAR models, Clustering, Factor Analysis, PCA, among others, in 17 projects upon client request.
- · Conducted training for R Programming and Biological Data Analysis.

Biostatistician | Autonomous Remote (Brazil)

Autonomous

2015 - 2021

- · Conducted customized data analyses for 10 clients, meeting specific requirements.
- Enhanced decision-making accuracy in hospitals by adjusting potentially misleading key performance indicators (KPIs), such as emergency department wait times, favoring analysis based on median and mode over mean.
- Performed statistical power and effect size calculations for analyses aimed at publication, fulfilling reviewer demands and ensuring the acceptance and publication of the article.

## **Education**

## Doctor of Philosophy | Ecology, Genetics and Evolution

Buenos Aires (Argentina)

Buenos Aires University

2018 - Atual

*Coursework*: quantitative remote sensing for environmental issues, bayesian statistics in ecology, epidemiology fundamentals, time series analysis, advanced health and environmental modeling, panoramic epidemiology techniques, biotoxinology overview

## Master | Environmental Sciences

Cascavel (Brazil)

Western Paraná State University

2016 - 2018

Coursework: multivariate data analysis, advanced biostatistics, basic biostatistics, numerical ecology, theoretical ecology, geostatistics (auditor), niche modeling and species distribution, environmental quality and natural resource management

#### Bachelor | Biological Sciences

Palotina (Brazil)

Federal University of Paraná

2010 - 2014

Coursework: mathematics, biostatistics (I and II), numerical methods in ecology, ecology, remote sensing, and geoprocessing

#### **Technician | Environmental Sciences**

Cascavel (Brazil)

State Technical School

2005 - 2009

## Languages

Portuguese (Native), Spanish (Intermediate) and English (Intermediate)

Made with Python and Quarto

github/mmfava/resume, 01/03/2024