# Marília Melo Favalesso

+55 45 99829-2469 | marilia.melo.favalesso@gmail.com | linkedin.com/in/mariliafavalesso/ | github.com/mmfava

#### **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 implemented predictive models and clinical outcome indicators, which have proven valuable for risk stratification, personalized patient treatment, and efficient resource allocation.
- Applied statistical and machine learning techniques to identify anomalous data and detect irregularities in the Brazilian Unified Health System (SUS). The proposal was approved, allowing for the development of models for production.
- Created interactive dashboards and reports to enhance data interpretation and support evidence-based decisionmaking.
- Organized courses and initiatives to foster professional development and enhance scientific knowledge within the company.
- Contributed to scientific projects, leading to the writing and submission of scientific articles for publication.'

# **Biostatistician | Western Paraná State University**

Cascavel (Brazil)

What is Your Question?

2016 - 2018

- Co-created and implemented the QESP biostatistics consulting project, which served 60 researchers from diverse fields between 2016 and 2018. QESP raised R\$58,000 during this period, funding scholarships for both undergraduate and graduate members.
- Conducted 18 biostatistics consultations at QESP, utilizing advanced techniques including mixed and generalized linear models, autoregressive models, and multivariate analyses.
- Performed statistical tests, sample size calculations, effect size analyses, and statistical power analyses for over 10 projects.
- Optimized decision-making processes at a private hospital by reviewing and adjusting KPIs that were inadequately based on means. After analyzing the data distribution, I proposed using median or mode as alternative indicators, leading to improved decision accuracy.
- Taught R Programming and Biological Data Analysis courses to over 50 undergraduate and graduate students in Biology and Health, training them in programming, biostatistics, multivariate techniques, and other relevant skills."

## **Education**

## Doctor of Philosophy | Ecology, Genetics and Evolution

Buenos Aires (Argentina)

**Buenos Aires University** 

2018 - 2024

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