

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 | Buenos Aires University

Buenos Aires (Argentina)

Ecology, Genetics and Evolution

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 | Western Paraná State University

Cascavel (Brazil)

Environmental Sciences

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 | Federal University of Paraná

Palotina (Brazil)

Biological Sciences

2010 - 2014

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

Technician | State Technical School

Cascavel (Brazil)

Environmental Sciences

2005 - 2009

Languages

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

