

## Henrique Laureano

<https://www.linkedin.com/in/henrique-laureano-msc-025328179> | <https://henriquelaureano.github.io>

Senior Financial Data Scientist | Statistician | MSc in Statistics and Numerical Methods in Engineering

### Experience

**Senior Data Scientist**, Banco Bradesco – Curitiba-PR, Brazil [Mar, 2025 - Present]

Independent Model Validation and Monitoring team (AVIM, in Portuguese), working with the massified credit risk portfolio.

**Senior Data Scientist**, Volvo Trucks Latin America – Curitiba-PR, Brazil [Oct, 2022 - Feb, 2025]

BI & Advanced Analytics CoE under Business Control area.

- Short and long-term total market forecast (volume TMF) for Chile and Peru markets:
  - o Enhanced accuracy by more than 10%, reducing errors to under 3%.
- Six-digit cost reductions in monthly corrective expenses of service contracts using telemetry data modeling.
- Price optimization of gold service contracts, resulting in a 5% increase in sales and a 10% churn reduction.
- Selling and administrative (S&A) expenses annual forecast for LATAM HQ:
  - o Achieved a 9% cost reduction, totaling seven digits.

**Senior Statistician**, Pelé Pequeno Príncipe Research Institute – Curitiba-PR, Brazil [May, 2021 – Sep, 2022]

The research facility of the Pequeno Príncipe Hospital, the largest exclusively pediatric hospital in LATAM.

- Authored six international scientific publications.
- Led data visualization, sampling design, statistical and predictive modeling for complex, infectious, and oncogenetic diseases, as well as for epidemiological and clinical studies, and bioinformatics.

**Statistical Consultant**, Freelance [Jan, 2017 – Apr, 2021]

Provided statistical consultancy to researchers across a diverse range of fields including Agronomy, Biology, Economics, Electrical and Chemical Eng., Pharmacy, Education, Psychology, Chemistry, Medicine, and Zootechnics.

**Statistician**, Telehealth Center – Hospital das Clínicas (UFMG) – Belo Horizonte-MG, Brazil [Jul, 2016 – Dec, 2016]

Research group on echocardiography in tropical diseases, developing predictive and statistical models to identify and quantify risk factors for Chagas and rheumatic diseases. Study design, data analysis and visualization.

- Led the transition of data analysis platforms from SPSS to R, incorporating advanced techniques such as multivariate failure time models.

Transitioned to pursue a Master's in Statistics at UNICAMP, focusing on advanced stats methodologies.

### Education

**Masters in Statistics and Numerical Methods in Engineering**, Universidade Federal do Paraná (UFPR) [2021]

**Interrupted PhD in Applied Mathematics and Computational Sciences (AMCS)**,  
King Abdullah University of Science and Technology (KAUST) [2019]

**Interrupted Masters in Statistics**, Universidade Estadual de Campinas (UNICAMP) [2017]

**Bachelor in Statistics**, Universidade Federal do Paraná (UFPR) [2016]

## Programming Languages

- Advanced proficiency in **Python** and **R** for data manipulation, visualization, data analysis, modeling, and web scraping (e.g., using Selenium).
- Advanced proficiency in **SQL** and **Spark** (PySpark), including experience with Hadoop servers for data querying and manipulation.
- Previously proficient in **C++** - models developed during my Master's and PhD studies were written in C++ for computational efficiency.
- Experienced with SAS, Julia, MATLAB, and SPSS.

## Modeling Frameworks

- In Python, experienced with PyTorch, JAX, TensorFlow, Keras, and MLflow.
- In R, proficient in INLA, Stan, RTorch, TMB, JAGS, and WinBUGS.

## Business Intelligence

- Advanced proficiency in **Power BI** and its underlying languages, DAX and Power Query.
- Proficient in Shiny (R) and Streamlit (Python).

## Cloud (Azure)

- Advanced proficiency in Databricks (including MLflow and Docker) and experience with Data Factory, and OpenAI Studio.

## Reproducibility

- Advanced proficiency in Git and its platforms: GitHub, Bitbucket, and Gitlab.