

# Carlo Domenico Longo de Lemos

Staff Data Scientist @ DataLab Serasa Experian

São Paulo, Brazil

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ML blog: [vitaliset.github.io](#)

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## WORK EXPERIENCE

**Serasa Experian (credit bureau) | Latin America DataLab**

1y11mo - **São Paulo, Brazil**

**Staff Data Scientist**

1mo - **09/2023 - Present**

- For the past 4 months, I have led GenAI implementations as the team's tech lead. Coordinating a team of two data scientists and one data engineer in building NLP applications such as a legal copilot and a custom email campaign generator. Leveraged the use of retrieval augmented generation minimizing hallucination.

**Senior Data Scientist**

1y4mo - **05/2022 - 08/2023**

- Developed an insurance claims forecasting framework that outperformed the previous model by over 10 ROCAUC points, surpassing industry benchmarks. Introduced an MLOps template using Docker and Airflow for automated client backtesting, which saved substantial analyst time.

**Data Scientist II**

6mo - **11/2021 - 04/2022**

- Led a team of two junior data scientists in developing a credit score for the agricultural sector resulting in a product that raises 5M USD annually. Defined target population and designed business-centric metrics. Replaced external data source, improving model autonomy without sacrificing performance.

**Itaú Unibanco (bank) | Advanced Analytical Consulting Management**

2y1mo - **São Paulo, Brazil**

**Data Scientist I**

1y - **11/2020 - 10/2021**

- Led a team of two data science interns in developing a model to set monthly sales targets to Itaú's bank officers using causal inference. A/B testing validated projected 3% annual revenue increase for tested products (equivalent to USD 90M).

**Data Science Intern**

1y1mo - **10/2019 - 10/2020**

- Enhanced business processes using Python's pandas and SQL, reducing operation time by 99%.
- Designed causal inference model for pricing, assessing Itaú portfolio elasticity. Introduced a new pricing dimension, impacting 30M customers.

## EDUCATION

**University of São Paulo (USP)**

08/2021 - Present

**Master's degree in Probability and Statistics - Part time student**

[GPA: 4/4](#)

**Thesis:** Threshold tuning of the probability simplex in multiclass classification

**Federal University of ABC (UFABC)**

05/2015 - 04/2021

**Bachelor's degree in Science and Technology (Pure Mathematics)**

[GPA: 3.88/4](#)

**Undergraduate research fellowships:**

- Wada Property in Doubly Transient Chaos (FAPESP - 2019)
- The Euler-Maclaurin formula and a few applications in Pure and Applied Mathematics (FAPESP - 2018)
- Numerical study of orbits in the 3-body problem (CNPQ - 2017)
- Introduction to stellar structure and evolution (UFABC - 2016)