Leonardo Cerliani

Data Analyst and Scientific Researcher

- **Experienced scientific researcher and data analyst**. Accustomed to investigate large datasets, seeking patterns leading to meaningful discoveries and actionable insights.
- **Proficient in communicating complex ideas and data insights to diverse audiences and stakeholders** through presentations, technical reports, dashboards and publications.
- Passionate about professional and human interaction, I deeply value team work and the collective effort required to derive value from data, finding **collaborative achievements more rewarding than individual accomplishments.**
- **Extensive experience in coding in R, Python, bash, Matlab**, considering coding a key approach to effective and reproducible data analysis. Accustomed to using **spreadsheets**, generate advanced **SQL queries** and building **dashboards in Tableau.**
- **Committed to ongoing learning** and eager to explore emerging technologies, with aspirations to gain certifications in cloud computing and data engineering.

WORK EXPERIENCE

Short description for latest experiences. Details for all projects available in the full CV on GitHub

Specialization in Business Data Analytics

Turing College - Vilnius, Lithuania (online)

2023

Full Scholarship recipient · Key Performance Indicators · Data Processing · Business Insights · Hypothesis Testing · Statistical Analysis · Data Research · Presentation Skills · Attention to Detail · Problem Solving · Visualization · Ad Hoc Analysis · Skill Development · Client Presentation · Knowledge Acquisition · Linear Regression · Data Cleaning · Communication · SQL · Google Sheets · analytical thinking · Google BigQuery · Tableau · Presentations

Horeca B2B business (Career break)

Amsterdam

2022

Supported my wife in establishing and running a professional Horeca Business producing and selling fresh pastries to retailers · Project development · Business analysis · Logistics - Managing the supply chain · Developing relations with clients

Data Analytics for Neuroimaging: Neuropsychiatry, Layer fMRI

Dept. of Psychiatry UMC locatie AMC - UvA - Netherlands Institute for Neuroscience

2018 - 2021

Data (pre)processing pipelines for neuroimaging data in R. Python, bash · Statistical analysis · Code documentation · Report writing for publication · Training students · Organizing and leading research meetings · Shiny app development

Data Analytics for Photobiology

Freelance Data Analyst for the U. of Helsinki in collaboration with Luke.fi.

2018 - 2019

Modelling light spectra based on atmospheric data · Collecting and processing satellite data · Development of a R/Shiny app to show the impact of different plant-covering materials on the light spectrum · Link to the app

ETL Developer

Leaseplan Bank - Amsterdam

2018

Hired as a freelance by NextGen Metrics B.V. to design and implement IBM DataStage workflows for data extraction, mapping, aggregation, transformation for financial banking data in IBM DataStage · Agile work planning in Interaction with a team lead by Deloitte · Collaboratively wrote the documentation for the ETL logic

Neuroimaging Software Development in Python

Max Planck Institute for Human Cognitive and Brain Sciences

2017

Researcher in Comparative Brain Connectivity

Brain and Spine Institute (ICM), Hôpital Pitié-Salpêtrière, Paris

2014 - 2017

Postdoctoral Fellow in Neuroimaging for Neuropsychiatry

Netherlands Institute for Neuroscience, Amsterdam

2012 - 2014

Postdoctoral Fellow in Neuroimaging for Neuroanatomy

University Medical Center Groningen

2007 - 2012

Residence: Amsterdam (NL)

Nationality: Dutch

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LINKS

- Linkedin
- Github
- Quarto blog (recent)
- Publications

SKILLS

- Data Preparation / EDA
- Advanced SQL query (BigQuery)
- Descriptive and inferential statistics
- Visualization (R/Shiny, Tableau)
- Results communication
- Analysis/Code documentation (R, Python, bash)
- Training colleagues and students

CODING EXPERIENCE

(click the language for code samples)

- R / Shiny (2018-2023)
- Bash scripts (2005 - 2021)
- Python (2016 - 2021)
- Matlab (2007 - 2016)
- SQL (2022 - 2023)

EDUCATION

- Turing College Data Analyst (2023)
- PhD Cognitive Science (2006)
- MA Philosophy + Neuroscience (2002)

REFERENCES

see all on Linkedin

LANGUAGES

- English (fluent)
- French (fluent)
- Dutch (fair)
- Italian (native)

AWARDS

- KNAW Brain Award for Scientific Excellence

"A brain disconnected from the heart is an airplane without wings"

Sample Projects

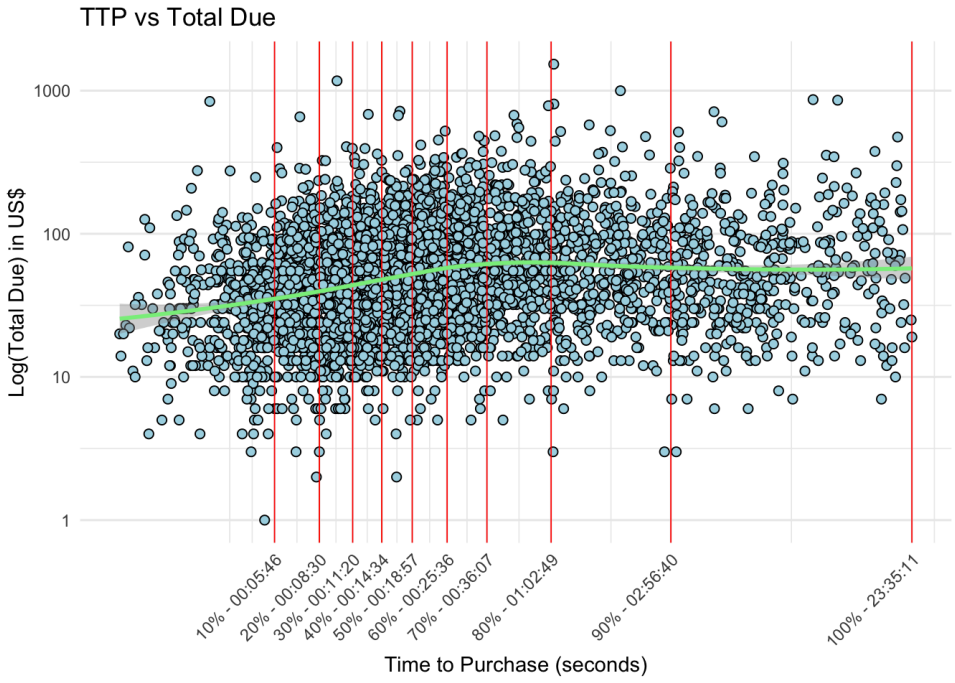
Click on the title to visit the project's report/dashboard

A consistent relation between session duration (TTP) and order value only for ON SALE website category.

Session length on the Google Merchandise webstore is associated with order value only for sessions up to 30-60'.

However, customers targeting the ON SALE section consistently spend more time and buy more than in any other section.

This suggested to enhance marketing campaign sections over a more sophisticated search refining tool in the user interface.

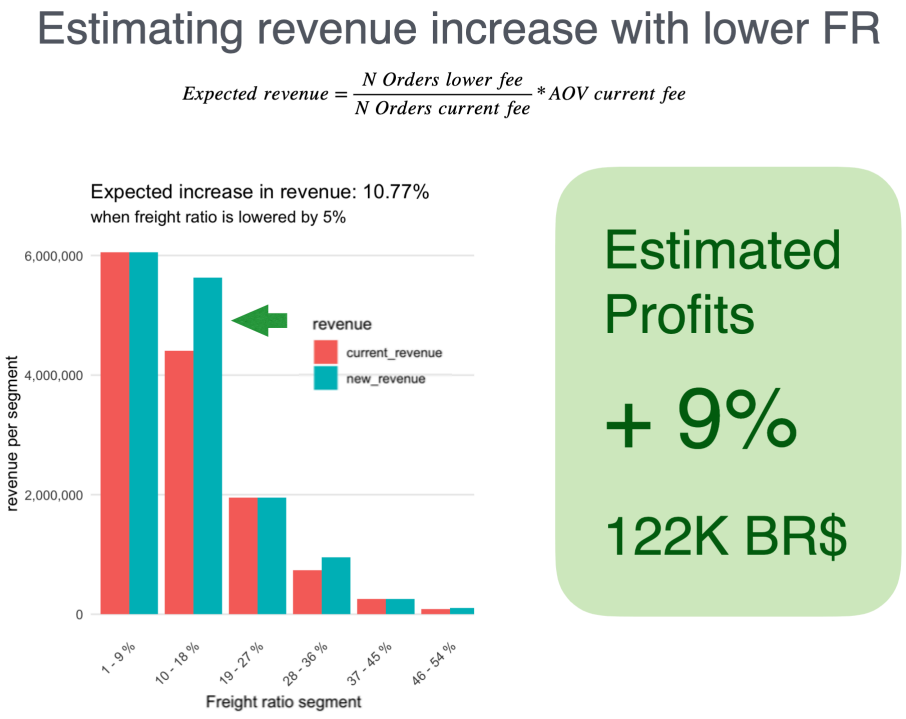


Stimulating conversion to purchase with a surgical reduction of excessive shipping fees in small-value orders

Examining the historical data (~100k datapoints) of the Brazilian marketplace Olist I detected excessive freight ratios - way above industry standards.

High shipping fees being the #1 cause of cart abandonment (a staggering 70%) this likely played an important role in hindering revenues growth.

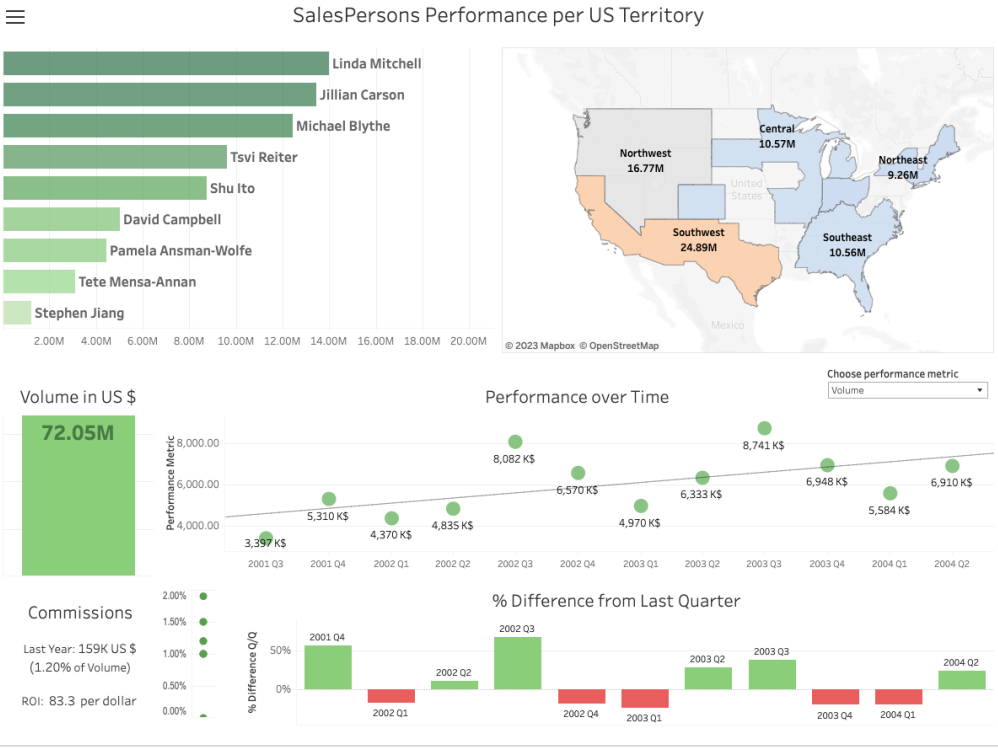
A simple analysis suggested that by surgically lowering the freight ratio by 5% only in small orders, the company could increase its profit by 9%.



Salespersons' performance assessment across US regions

A Tableau dashboard on the AdventureWorks bike store dataset, designed to explore the performance of different salespersons across US territories.

This allows to dissect the complexity of the many-to-many (salespersons-to-territory) relationship, and to better assess the salespersons' performance beyond the mere total sales.



Customer segmentation based on Recency, Frequency, Monetary (RFM)

Customer segmentation dashboard for the Google Merchandise webstore, allowing to:

1. Show summary metrics for a given customer segment or for a selection across segments

2. Drill down the RFM measures to the level of the single customer

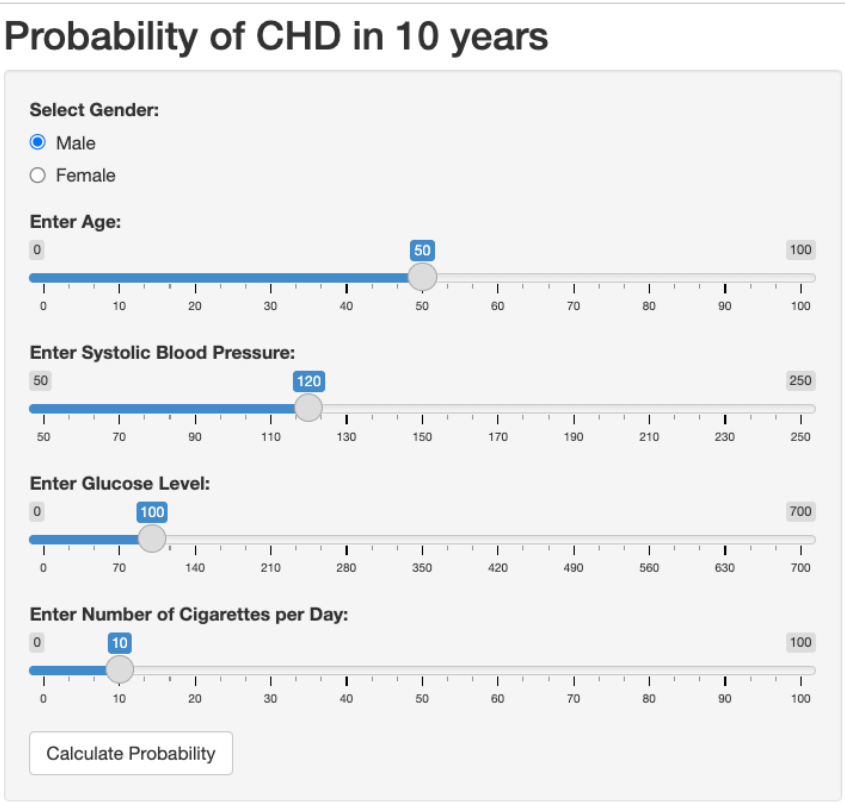
3. Get a bird's eye visual overview of the proportion of customers in each segment

Predicting the 10-year risk of cardiovascular disease (with embedded app)

Using logistic regression, I developed a model to predict the risk of developing coronary heart disease in 10-years, focusing on maximising specificity (84%)

The model is simple, including easily retrievable demographic variables and results from GP examination or blood analysis.

The project is naturally complemented by a Shiny app that encapsulate the model.



Estimating the light spectra reaching plants covered with different materials (code / app)

Knowledge of light conditions under greenhouse materials allows growers to choose those those improving plant growth and yield through manipulation of the spectral quality of sunlight.

This app models the spectrum of sunlight according to atmospheric condition from NASA measurements all over the world, and corrects it for 80+ commercially available screens.