# TIAGO CABAÇO

# ☐ PROFESSIONAL EXPERIENCE

October 2023 | August 2022

### Senior R Developer

Civey

Perlin. DE

- Developed R statistical libraries used daily to transform millions of user's poll answers into statistically representative results, used on all the company's costumer-facing products.
- Analyzed data from millions of users using R, PostgreSQL and Clickhouse and produced visualizations, dashboards and reports to answer stakeholder's analytical requests, resulting in a better support for decisions across our products.
- Contributed to an extensive refactoring of a core functionality which simplified its maintenance and improved its extendibility, culminating in the development of a new product.
- Coordinated the monitoring of our R software products, including the cooperation with other teams, which resulted in the development of new monitoring features and dashboards (e.g. Slack bots or Redash Dashboards) and in an improved communication and efficiency in problem-solving.
- Developed internal tools with R, Bash, PostgreSQL, Clickhouse and Python used to support other teams, resulting in an increased speed and flexibility to meet customer's requests.
- Created documentation covering the statistical concepts and logic used in our products, which resulted in the improved understanding of our products, both internally and by other teams.
- Trained new team members by using documentation, learning sessions, joint code reviews and pair-programming.

2022 | 2020

### R Developer

Civey

Perlin. DE

- Contributed to the development of R libraries used to calculate more then 10.000 representative survey results daily.
- Lead the development of a new feature for geographical survey analysis, resulting in an new product.
- Developed a service that daily updates statistical estimates of the German population using R and Python Airflow, which directly improved the quality of our poll results.
- Contributed to the development of bash command line tool used to configure the R environment in production, resulting in efficient and safe workflow for new releases to production.

# **CONTACT INFO**

github.com/tau31

**\** +49 176 439 822 51

### **SKILLS**

R package development

Statistical analysis

Effective communication of complex analytical concepts, including public speaking

Data cleaning and pre-processing

Data visualization

#### **Programming Languages**

Highly skilled in R

Skilled in Bash, Stan and SQL (PostgreSQL, Clickhouse, DuckDB)

Familiar with Python

#### **Tools**

Git (version control and collaboration)

Quarto reports (dynamic documentation with R)

Redash (dashboard building tool)

#### Languages

English (Fluent)

Portuguese (Native)

German (A1)

2020 2016

#### **Doctoral Research Fellow**

**Humboldt-University** 

Berlin, DE

- Grant by the International Max Planck Research School on the Life
- Worked with large data (millions of observations), using R to program and test automated quality checking and data manipulation routines.
- · Applied hierarchical Bayesian regression and mixture modeling techniques, using the Stan probabilistic programming language, to account for different aspects of how the data was structured and
- Use of high performance computing clusters and threading in order to provide scalable modeling solutions, reverting in added time to iterate over model building.
- Developed visualizations using ggplot in R to efficiently communicate insights and assess statistical model performance.



# **EDUCATION**

2022 2016

# PhD in Computational Psychology

**Humboldt-University** 

Berlin

- · Grant by the International Max Planck Research School on the Life Course.
- · Incomplete did not graduate.

2014

# **Erasmus Intensive Program in Mathematical Psychology**

University of Tartu

Sagadi, Estonia

2015

2012

# **Masters in Clinical Psychology**

University of Lisbon

Lisbon, Portugal

For my thesis I developed and deployed an online survey, and selflearned R to implement a non-standard statistical model. All of which resulted in receiving the highest grade with distinction.

2011 2009

#### **BA in Psychological Sciences**

University of Lisbon

Lisbon, Portugal