

Florian Metwaly

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EDUCATION

University of Amsterdam

Amsterdam, Netherlands

PhD Candidate — Psychological Methods Group — [Bayesian Graphical Modeling Lab](#)

September 2025 – Present

- Bayesian Methods for Network Analysis of Intensive Longitudinal Psychometric Data

Utrecht University

Utrecht, Netherlands

M.Sc. Methodology and Statistics for the Behavioural, Biomedical and Social Sciences

September 2023 – June 2025

- Thesis: *Improving Causal Inference from Observational Data: A Comparative Analysis of Confidence Interval Methods in Sequential Target Trial Emulation*
- Development of a Julia package ([Package Repository](#)) which can be used to apply the sequential Target Trial Emulation framework on observational time-to-event data sets. Further, implement the estimation of confidence intervals through bootstrapping and compare its performance against sandwich variance estimators in a simulation study. All data and the current progress are available on GitHub ([Thesis Repository](#)).
- Supervised by [Dr. Oisín Ryan](#) and [Dr. Wouter van Amsterdam](#).

University of Turku

Turku, Finland

B.A. Political Science — Exchange Student

January 2022 – May 2022

Goethe-University Frankfurt

Frankfurt, Germany

B.A. Political Science — Minor: Philosophy

October 2019 – August 2023

- Thesis: *Populism and New Media: Measuring Populist Discourse on Twitter*
- Development of a framework to measure populist appearance on Twitter based on theory. Applying that framework by training supervised machine learning algorithms, comparing their performance, and finally using the best performing one to analyse a large data set of Tweets by German politicians.

EXPERIENCE

Julius Centrum – UMC Utrecht

Utrecht, Netherlands

Student Teaching Assistant

September 2024 – August 2025

- Reviewing and creating teaching materials and tutoring during computer labs.
- Courses: Epidemiology & Big Data, Onderzoeksmethoden (Research Methods), Generalised Linear Models, Klinisch Wetenschappelijk Onderzoek (Clinical Scientific Research), Survival Analysis

Department of Methodology and Statistics

Utrecht, Netherlands

Student Teaching Assistant

April 2025 – May 2025

- Summer School: [A Gentle Introduction to Bayesian Estimation](#)
- Translating all teaching materials from R (brms) to Python (bambi, PyMC) as additional teaching material for the 2025 summer school

Internship — Student Research Assistant

August 2024

- Internship on using Bayesian Evidence Synthesis (BES) to aggregate evidence in the form of Bayes Factors from partially overlapping hypotheses. Conducting a simulation study to investigate the behavior of BES under different scenarios.
- After the internship, the project is continued with the goal of publishing the findings in a scientific journal.
- Working title: Bayesian Evidence Synthesis: Aggregating Evidence from Partially Overlapping Hypotheses.
- The current progress is available on [GitHub](#)
- Supervised by [Prof. Dr. Irene Klugkist](#), [Dr. Duco Veen](#) and [Alfons Edmar](#).

Student Teaching Assistant

June 2024 – August 2024

- Reviewing and creating teaching materials for the summer schools and tutoring during computer labs.
- Summer School: [A Gentle Introduction to Bayesian Estimation](#)
- Summer School: Advanced longitudinal modeling in Mplus

Student Research Assistant

November 2023 – August 2025

- Research Assistant on the BePrepared Consortium under the supervision of [Dr. Peter Lugtig](#).

- Finding, collecting, and evaluating new and existing data sources that can be used to monitor social behavior during pandemics on various parameters.
- Smaller tasks for Statistics Netherlands (CBS), including labeling data and testing an app developed by CBS.
- Improving and further developing an R-Shiny app to track publications of the Methodology & Statistics Department.

Chair for Sociology specializing in Quantitative Methods

Frankfurt, Germany

Student Research Assistant

October 2022 – August 2023

- Research Assistant under the supervision of Prof. Dr. Alexander Schmidt-Catran.
- Support of different research projects by conducting statistical analyses with R, replicating studies, literature reviews, and smaller tasks like creating a survey for future research, data labelling, and proofreading papers.

TechAcademy e.V.

Frankfurt, Germany

Product Development

April 2023 – August 2023

- As a student organization TechAcademy e.V. offers various courses and events during the semester to teach coding and product development to other students.
- Responsible for the Python track, where we designed a Data Science project for the students to follow during the semester to learn Python. This included the development of teaching materials and small lectures.
- Organization of social events in which we encourage networking between students with each other and with professionals.

Bavarian State Institute for Higher Education Research and Planning (IHF)

Munich, Germany

Student Research Assistant

July 2021 – June 2022

- Finishing different projects started during the internship.

Internship

April 2021 – July 2021

- Using STATA and R for statistical analyses for the DiHS.c project.
- Using MaxQDA for preparing open-ended survey questions for further evaluations.
- Various literature reviews and smaller student assistant tasks.

SKILLS

Languages: German (Native), English (Fluent), Dutch (B1), Spanish (B1)

Programming Languages: R, Julia, Python, STAN

Tools: Git, Mplus, STATA, SPSS, JASP, L^AT_EX, MaxQDA