Judith Neve, MSc



Key skills

- Data visualisation and analysis
- Statistics and probability
- Simulation studies
- Machine learning
- Model training and tuning
- Statistical programming
- Problem solving
- (Science) communication
- Time management

Education

2021—2023 Methodology and Statistics for the Behavioural, Biomedical, and Social Sciences MSc (cum laude), Utrecht University, Utrecht, Netherlands

Applied Data Science track, covering exploratory analysis, data visualisation, supervised and unsupervised learning, regularisation, deep learning and natural language processing.

Thesis project focus: Evaluating hyperparameter tuning procedures in predictive modelling considering both model predictive performance and training time, to obtain models that perform well without causing unnecessary strains on resources.

- GitHub repository.
- O Results visualisation (Shiny app).
- O Successfully designed and programmed a complex simulation study, manipulated and analysed results, providing invaluable insights into model training.
- O Soon to be submitted for publication in a scientific journal. This has the potential to significantly impact current model tuning practices.

2017—2021 Psychology and Statistics Bsc (First Class Honours), University of Glasgow, Glasgow, United Kingdom

Dissertation project focus: Assessing the evolution of data sharing practices in the psychological literature.

- Preprint (accepted for publication in Meta-Psychology).
- O Open Science Framework project.
- O Collected original data and combined it with pre-existing data in a different format.
- Developed Generalised Additive Models and (polynomial) logistic regression to analyse the data.

Work experience

Nov.2021— Teaching Assistant, Department of Psychology, Utrecht University, Utrecht, Netherlands

- Dec. 2022 Skills developed: Communication of statistical concepts, leadership, teamwork, attention to detail, organisation, time management, integrating feedback.
 - O Delivered tutorials explaining technical statistical concepts in straightforward terms, adapting my communication strategies to accommodate varying levels of understanding among students.
 - Proactively reviewed students' homework assignments before each session and tailored teaching materials to address identified knowledge gaps.
 - O Created and updated online instructional materials for statistics courses, incorporating interactive learning tools to enhance student comprehension and retention.
 - Updated all analyses from SPSS to JASP, following a curriculum switch.

Oct. 2021— Research Assistant, Department of Methodology and Statistics, Utrecht University, Utrecht, Apr. 2022 Netherlands

- O Skills developed: Automation, R package building, attention to detail, teamwork, communication.
- O Spearheaded the comprehensive testing and troubleshooting of the R package CTmeta, ensuring optimal accuracy and efficiency for its users.
- O Demonstrated exceptional attention to detail in identifying and resolving errors in the code, resulting in a seamless and error-free user experience.
- Contributed to the accessibility and usability of the package by reviewing and revising its documentation, resulting in clearer and more concise instructions for users.

- Oct. 2021 **Teaching Assistant**, Department of Information and Computing Science, Utrecht University, Utrecht, Netherlands
 - Skills developed: Critical thinking.
 - O Leveraged statistical expertise to identify relevant documents for each of 150 statistical queries in an AI study, supporting research and development efforts.
- June—Dec. Research internship under the supervision of Dr. Zsolt Péter Szabó, At Work Kft., 2020 Budapest, Hungary
 - Skills developed: Communication of statistical results, psychometric test validation, exploratory data analysis.
 - Acquired expertise in factor analysis through leading exploratory and confirmatory factor analyses on the Hungarian translation of the Short Dark Triad questionnaire.
 - O Third author on the resulting publication, which validates the questionnaire for use.
- June—Aug. Voluntary research work under the supervision of Dr. Emily Nordmann, Department of 2019 Psychology, University of Glasgow, Glasgow, United Kingdom
 - **Skills developed**: Communication, critical thinking, text mining basics, exploratory data analyses, data cleaning.
 - Thoroughly cleaned a language use dataset prior to conducting exploratory analyses, requiring close attention to detail and critical thinking to ensure the quality and integrity of the dataset.
 - O Led exploratory analyses and conducted a literature search to contextualize the results.
 - O Resulting findings are used in Dr. Nordmann's annual presentation on the psychology of swearing.
- June 2018 **Field investigator**, *MC2*, Préval, France
 - O Skills developed: Communication, time management, attention to detail.
 - Occollected responses to a marketing questionnaire in a restaurant setting, effectively engaging with participants to gather high-quality data in a fast-paced environment.

Community engagement

- 2020—2021 **Vice President Treasurer**, Glasgow University LGBTQ+ Society
 - O Skills developed: Leadership, teamwork, teambuilding, communication, organisation.
 - Oversaw the society's financial management, identifying and correcting inconsistencies in previous reports and ensuring accurate record-keeping.
 - O Collaborated with the President and Vice President Secretary to effectively manage an 18-person committee and ensure the smooth operation of one of the largest student societies in Scotland.
 - Coordinated efforts to maintain regular society events and activities during the COVID-19 pandemic, positioning the society as one of the few on campus to continue providing meaningful engagement and community support for students.
- 2019—2020 International Officer, Glasgow University LGBTQ+ Society
 - O Skills developed: Teamwork, communication, organisation.
 - Worked collaboratively with the society committee to ensure the smooth running of the society.
 - Organised and moderated a range of events aimed at LGBTQ+ students.
 - Acted as a key point of contact between international students and the society committee, providing support and guidance as needed.
 - O Led regular coffee meetups to provide a relaxed and welcoming environment for international students to socialize and connect with one another.

Prizes and awards

- 2021 **Distinguished first class Honours**, *University of Glasgow*, United Kingdom Among the 25% highest performing first class honours students in Psychology.
- 2021 **Research Methods prize**, *University of Glasgow*, United Kingdom Best final year project in research methods.
- 2020 **SAS prize with high distinction**, *University of Glasgow*, United Kingdom Best final year project on Bsc Psychology and Statistics.
- 2020 **Merit list Psychology level 3**, *University of Glasgow*, United Kingdom Figuring on the list of psychology students obtaining an A grade in academic year 2019/2020.
- 2018 **Merit list Psychology level 1**, *University of Glasgow*, United Kingdom Figuring on the list of psychology students obtaining an A grade in academic year 2017/2018.

IT skills

R, proficient

Experience: 6 years.

- O Familiar with base R and tidyverse.
- O Data wrangling, visualisation, and analysis.
- Writing functions.
- Data simulation.
- O Reproducible reports in R Markdown.

Mplus, *intermediate* Experience: 3 months.

- Data analysis.
- Fitting various structural equation models.
- Interpretation of output.

Python, intermediate

Experience: 1 year.

- O Data wrangling, visualisation and analysis using e.g. pandas, seaborn, scikit-learn.
- O Manipulation of variables and dictionaries.
- Writing functions.

JASP, SPSS, intermediate

Experience: 6 months.

O Fitting models

Languages

English, C2

French. C2

Hungarian, C1

Publications

Neve, J., & Rousselet, G. (2021). The Evolution of Data Sharing Practices in the Psychological Literature. Meta-Psychology (undergoing copyediting). https://doi.org/10.31234/osf.io/3xdja

Szabó, Z. P., Czibor, A., Neve, J., Restás, P., Hadarics, M., Szijjártó, L., Simon, E., Marót, J. L., Kun, Á., & Bereczkei, T. (2021). Development of the hungarian version of the short dark triad questionnaire (SD3-HU): Psychometric properties and validity. <u>Current Psychology</u>. https://doi.org/10.1007/s12144-021-02470-4

LaTeX, proficient

Experience: 3 years.

- Creation of documents.
- Beamer.
- Personalisation of templates.

GitHub, intermediate

Experience: 2 years.

- Collaboration on projects using forks or the same repository.
- Version control.
- GitHub pages.

Cluster computing, basic

Experience: 3 months.

- Running large batches of R scripts in parallel.
- Collecting resulting data for further, smaller-scale analyses.