Judith Neve, MSc

Key skills

- Statistics and probability
- Machine learning

- Programming in R and Python
- Parallel computing
- Manipulation of large datasets
- Data visualisation and analysis

IT skills

- R, proficient.
- LaTeX, proficient.
- Python, intermediate.
- SQL, intermediate.
- Excel, intermediate.
- JASP, SPSS, intermediate.
- Mplus, intermediate.
- GitHub, intermediate.
- o slurm, basic.
- O HTML, CSS, basic.
- Tableau, currently self-teaching.
- O Power BI, currently self-teaching.

Education

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

- O Followed the Applied Data Science track, covering data visualisation, supervised and unsupervised learning, regularisation, time series, deep learning, and natural language processing.
- Thesis project (conducted at the University Medical Centre): Evaluating hyperparameter tuning procedures in predictive modelling considering both model predictive performance and training time.
 - Gained insight into machine learning as used for predictive modelling in medicine.
 - Designed and programmed 3 complex simulation studies in R (tidyverse, caret, ranger), executed via **slurm** on a high performance computer.
 - Manipulated, visualised and analysed large datasets by aggregating thousands of files, providing invaluable insights into model training.
 - Innovated in results visualisation, allowing interactive exploration via R Shiny.
 - Generated a report in R Markdown (knitr, xtable) to mitigate transcription errors in numerical data.
 - Report (soon to be submitted for publication), GitHub repository, results dashboard in R Shiny.

Other key projects

- Recommender systems algorithms programmed in **Python (pandas, numpy, seaborn, scikit-learn)**.
- Poisonous mushroom classification algorithm programmed in R (tidyverse, randomForest, xgboost, rpart). Collaborated upon using GitHub.
- Gibbs sampler programmed in **R** (bain).
- Multiple imputation in the European Social Survey performed in R (mice).

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

- O Dissertation project: Assessing the evolution of data sharing practices in the psychological literature.
 - Using R, processed and combined three different datasets on the same topic to extend previous findings.
 - Analysed the data using generalised additive models and (polynomial) logistic regression.
 - Following best practices guidelines, developed the analysis framework in R using simulated data prior to data collection, facilitating streamlined data and analysis.
 - Preprint (accepted for publication in Meta-Psychology), Open Science Framework project.

Work experience

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

2022, O Delivered statistics tutorials, employing clear communication to explain complex concepts and accommodate varying levels of understanding among students.

May—Aug.

2022, \odot Proactively assessed students' homework assignments prior to tutorial sessions, identifying knowledge gaps and adapting teaching materials to provide targeted support and promote clarity.

Nov.—Dec. 2021

Collaborated with a small team to create online instructional materials with interactive learning tools in **Grasple**, effectively conveying complex ideas and processes in bite-sized formats to enhance student comprehension and retention.

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

June—Dec. Research internship, At Work Kft., Hungary

- 2020 \odot Acquired expertise in factor analysis through leading exploratory and confirmatory factor analyses in \mathbf{R} on the Hungarian translation of the Short Dark Triad questionnaire.
 - Third author on the resulting publication, which validates the psychometric questionnaire for use.

June—Aug. Voluntary research work, Department of Psychology, University of Glasgow, United Kingdom

- 2019 O Thoroughly cleaned a linguistic dataset, requiring close attention to detail and critical thinking to ensure the quality and integrity of the dataset.
 - O Led numerical and graphical exploratory analyses in **R** (tidyverse, tidytext), now used in Dr. Nordmann's annual presentation on the psychology of swearing.
 - Conducted a literature search to contextualise the results.

Community engagement

2020—2021 Vice President Treasurer, Glasgow University LGBTQ+ Society, United Kingdom

- Oversaw the society's financial management, identifying and correcting inconsistencies in previous reports and ensuring accurate record-keeping.
- Cooperated 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 weekly 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, United Kingdom

- 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 fortnightly coffee meetups to provide a relaxed and welcoming environment for international students to socialise 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 performance in Year 3 of 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.

Languages

○ English, fluent. ○ French, native. ○ Hungarian, fluent.

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. $\underline{\text{Current Psychology}}$. https://doi.org/10.1007/s12144-021-02470-4