Daniel Roelfs, PhD

PERSONAL AND CONTACT INFORMATION

- 🌐 danielroelfs.com
- ✉ daniel@roelfs.net
- ⌨ danielroelfs
- 🔗 danielroelfs

- ▦ danielroelfs.app
- ✖ danielroelfs.com
- ⓘⒹ 0000-0002-1083-002X
- 📶 online CV (cv.danielroelfs.com)

WORK EXPERIENCE

DATA SCIENTIST   AUG 2022 — CURRENT
DNB - Group Security - Group AML
- Data scientist in the Anti-Money Laundering Group at DNB
- Creating machine learning models using Python, R, and AWS cloud services and putting models in production

DOCTORAL RESEARCH FELLOW   MAR 2019 — JUL '22
University of Oslo - NORMENT - Multimodal Imaging Group
- PhD position on neuroimaging and genetics
- Running a study from conception through writing the final manuscript, analysis in R, Python, MATLAB, and a variety of additional tools

RESEARCH ASSISTANT   JUN 2018 — FEB '19
University of Oslo - NORMENT - EEG Group
- Managing EEG data, data preprocessing and analysis, training new EEG testers, performing EEG experiments

RESEARCH ASSISTANT   JUN 2018 — FEB '19
Rikshospitalet - Department of Medical Physics
- Data collection, management, and processing in an MRI study on sleep deprivation
- Processing and analyzing of data from the video camera

EDUCATION

PHD, DOCTORAL EDUCATION   MAR 2019 — JUL '22
University of Oslo - Faculty of Clinical Medicine
- Doctoral education at the Institute of Clinical Medicine at the University of Oslo
- Courses relevant to neurobiology, advanced statistics, and other academic and non-academic skills

MSC, BIOMEDICINE   SEP 2016 — MAY '18
Lund University - Faculty of Medicine
– Master's program in Biomedicine at the Faculty of Medicine
– Focus on molecular biology and neuroscience

BSC, PRE-MEDICAL TRACK   AUG 2012 — MAY '15
Utrecht University - University College Roosevelt
– Major in the pre-medical science track, minor in philosophy
– Liberal Arts & Science program
– Honors College

TECHNICAL SKILLS

Daily use of Python, R, SQL (various dialects), bash, AWS, Snowflake, Git, and common packages and module. Experience also with MATLAB, LaTeX, HTML/CSS. Have also previously worked with Google Cloud and SLURM.

In addition, I'm familiar with common data science and data engineering frameworks including but not limited to Shiny, Flask, Streamlit, MLFlow, Jenkins, Docker, Airflow, TensorFlow, LangChain, dbt, and various other common tools.

LANGUAGE SKILLS

| NORWEGIAN (C2) |
| ENGLISH (C2) |
| DUTCH (C2) |
| FRENCH (B2) |
| GERMAN (A2) |

AWARDS

ECIP ORAL FINALIST   2021
– Awarded to promising oral presentations from early-career researchers

INTERNATIONAL TRAINING GRANT   2019
– Grant awarded to scientists to receive training abroad that'll benefit their research in Norway

SPARBANKEN SKÅNE MASTER PRIZE   2019
– Awarded to the best master theses in the field of neuroscience

CLINICAL EXPERIENCE

Between my BSc and my MSc I worked for a year in various positions at the University Medical Centre Utrecht and the Gelre Hospital in Apeldoorn to obtain additional practical clinical and research experience.

COMMISSIONS

DNB DATA SCIENCE MEETUP   AUG 2023 — DEC '24

NRSN ANNUAL CONFERENCE   SEP 2019 — SEP '21
– Organization of the national conference of the Norwegian Research School for Neuroscience its members

THE NETHERLANDS RED CROSS STUDENT DESK ZEELAND   JAN 2014 — MAY '15

PORTFOLIO

I occasionally write blogposts that serve as tutorials or showcases for how I solve certain data science problems. The headers in this section link to the relevant webpages.

DANIELROELFS.COM
– Includes tutorials on statistics and data science
– Tutorials contain code written in R and Python, website generated using Hugo and Quarto
– Featured on the front page of HackerNews

DANIELROELFS.APP
– Collection of apps for various uses, self-hosted from a Raspberry Pi
– Apps created in Flask and Shiny

BILKOLLEKTIVET TRIP COST CALCULATOR
– Shiny app to estimate the cost of a car rental through Bilkollektivet

PRESENTATIONS & TALKS
– Slides and resources for public talks, workshops, and presentations since 2019

INTRODUCTION TO BASIC STATISTICS IN R
– Online book to help medical researchers get started in R

PUBLICATIONS

- **D Roelfs**, …, T Kaufmann *Genetic overlap between multivariate measures of human functional brain connectivity and psychiatric disorders*. *Nature Mental Health*. doi: 10.1038/s44220-023-00190-1 preprint: 10.1101/2021.06.15.21258954

- **D Roelfs**, …, T Kaufmann *Shared genetic architecture between mental health and the brain functional connectome in the UK Biobank*. *BMC Psychiatry*. doi: 10.1186/s12888-023-04905-7 preprint: 10.1101/2022.06.24.22276846

- **D Roelfs**, …, T Kaufmann *Phenotypically independent profiles relevant to mental health are genetically correlated*. *Translational Psychiatry*. doi: 10.1038/s41398-021-01313-x preprint: 10.1101/2020.03.30.20045591

- I Voldsbekk, …, **D Roelfs**, …, II Maximov *Sleep and sleep deprivation differentially alter white matter microstructure: A mixed model design utilising advanced diffusion modelling*. *NeuroImage*. doi: j.neuroimage.2020.117540 preprint: 10.1101/ 2020.08.24.259432

For an extended list of publications, see the publications list on my website, ORCID or my Google Scholar profile.