DANIEL ROELFS

WORK EXPERIENCE

DNB - GROUP SECURITY - GROUP AML   2022 - current
Data Scientist

- 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

UNIVERSITY OF OSLO - NORMENT - MULTIMODAL IMAGING GROUP   2019 - 22
Doctoral Research Fellow

- 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

UNIVERSITY OF OSLO - NORMENT - EEG GROUP   2018 - 19
Research Assistant

- Managing EEG data, data preprocessing and analysis, training new EEG testers, performing EEG experiments

RIKSHOSPITALET - DEPARTMENT OF MEDICAL PHYSICS   2018 - 19
Research Assistant

- Data collection, management, and processing in an MRI study on sleep deprivation
- Processing and analyzing of data from the video camera

EDUCATION

UNIVERSITY OF OSLO - FACULTY OF CLINICAL MEDICINE   2019 - 22
PhD, Doctoral Education

- 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

LUND UNIVERSITY - FACULTY OF MEDICINE   2016 - 18

MSc, Biomedicine

- Master's program in Biomedicine at the Faculty of Medicine
- Focus on molecular biology and neuroscience

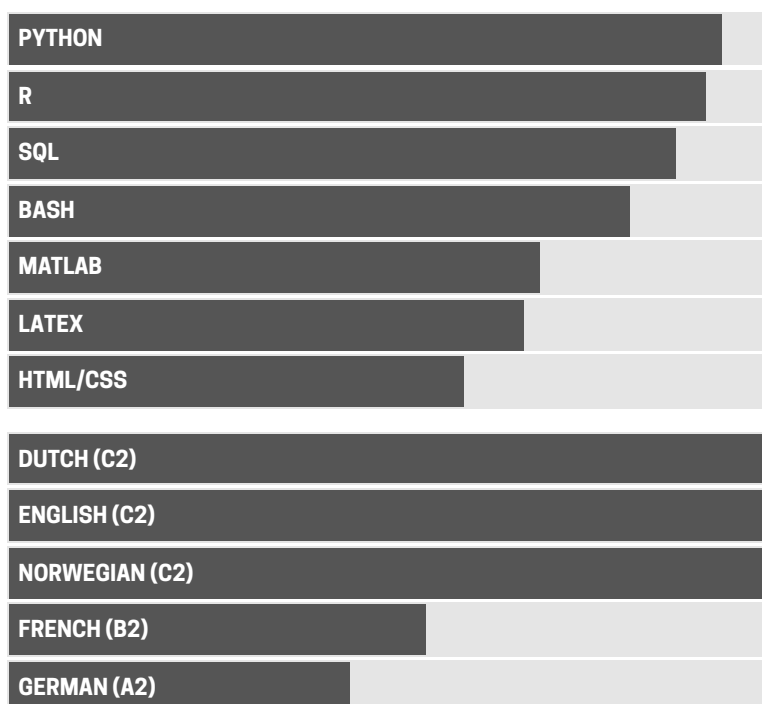## UTRECHT UNIVERSITY - UNIVERSITY COLLEGE ROOSEVELT   2012 - 15

BSc, pre-medical track

- Major in the pre-medical science track, minor in philosophy
- Liberal Arts & Science program
- Honors College

SKILLS & LANGUAGES

- PYTHON
- R
- SQL
- BASH
- MATLAB
- LATEX
- HTML/CSS

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

AWARDS

ECIP ORAL FINALIST   2021

World Congress of Psychiatry Genetics

- Awarded to promising oral presentations from early-career researchers

INTERNATIONAL TRAINING GRANT   2019

Norwegian Research School in Neuroscience

- Grant awarded to scientists to receive training abroad that'll benefit their research in Norway

SPARBANKEN SKÅNE MASTER PRIZE   2019

Sparbanksstiftelsen Färs & Frosta, Lund University

- Awarded to the best master theses in the field of neuroscience

COMMISSIONS

DNB DATA SCIENCE MEETUP   2023 - current

Committee Member

NRSN ANNUAL CONFERENCE   2019 - 21

Committee Member

- Organization of the national conference of the Norwegian Research School for Neuroscience its members

THE NETHERLANDS RED CROSS STUDENT DESK ZEELAND   2014 - 15

General Board Member (Fundraising portfolio)

PORTFOLIO

I occasionally write blogposts that serve as tutorials or showcases for how I solve certain data science problems

DANIELROELFS.COM

- Includes tutorials on statistics (link, link) and data science (link, link, link)
- Tutorials contain code written in R and Python, website is generated using Hugo and Quarto hosted through GitHub and Netlify

DANIELROELFS.APP

- Collection of apps for various uses, self-hosted from a Raspberry Pi (described here)
- 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 I've given since 2019

ADVENT OF CODE

INTRODUCTION TO BASIC STATISTICS IN R

- Online book to help medical researchers get started in R

SELECTED 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.