### DANIEL ROELFS

Biomedical researcher in Computational Psychiatry at the Norwegian Centre for Mental Disorders Research (NORMENT) with a focus on neuroimaging and genetics



### ▲ WORK EXPERIENCE

present 2019

### **Doctoral Research Fellow**

Multimodal Imaging group at NORMENT

- University of Oslo
- · PhD position on neuroimaging and genetics
- · Running a study from conception through writing the final manuscript
- · Writing scripts and pipelines in R, Python, and MATLAB

2019 2018

#### Research Assistant

**EEG Group at NORMENT** 

University of Oslo

- · Managing EEG data, data preprocessing and analysis, training new EEG testers, performing EEG experiments
- · Maintaining and adapting preprocessing pipelines for EEG data

2019 2018

#### Research Assistant

Department of Medical Physics

**♀** Rikshospitalet, OUS

- · Data collection, managment, and processing in an MRI study on sleep deprivation
- · Preprocessing and analyzing the imaging data and preparing datasets for collaborators
- · Processing and analyzing of data from the video camera

2018 2017

#### **Erasmus Traineeship**

**EEG Group at NORMENT** 

University of Oslo

- · Planning and running EEG experiments on participants
- · Processing and analyzing EEG data using MATLAB

2016 2015

### Research Intern

Brain Institute

- **Q** University Medical Centre Utrecht, NL
- · Idenifying risk factors associated with poor prognosis in children with CD or ODD

2015 2014

#### **Undergraduate Research Intern**

Emergis, Institute for Psychiatric and Mental Health Care

**Q** Goes, NL

· Identifying risk factors associated with physical restraint in acute psychiatric care



View this CV online with links at danielroelfs.github.io/cv/

### CONTACT

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- @dthroelfs
- danielroelfs
- in danielroelfs
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- danielroelfs.com

### SKILLS & LANGUAGES

R
Python
MATLAB
Bash
LaTeX
HTML/CSS
SQL

Dutch (Native)	
English (C2)	
Norwegian (B2/C1)	
French (B1)	
German (A2)	

#### **Undergraduate Research Intern** 2014

Erasmus Cancer Institute Rotterdam

• Rotterdam, NL

· Status research into comorbidities associated with different cancer therapies

### **EDUCATION**

present 2019

### PhD, Doctoral Education

University of Oslo

Oslo, NO

- · 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 2018 2016

**Lund University** 

Q Lund, SE

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

2015 2012

### BSc, Pre-medical track

University College Roosevelt, Utrecht University

Middelburg, NL

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

2014 **Epidemiology (summer course)** 

University College Roosevelt, Utrecht University

Middelburg, NL

· Summer course in theory and methods behind epidemiology

French Language & Literature (summer course) 2013

Université de Paris I: Panthéon-Sorbonne

Paris, FR

· Summer course in French language and literature

## **U** CLINICAL EXPERIENCE

2016

Assistant nurse/phlebotomist

Gelre Hospital Apeldoorn

Apeldoorn, NL

The PhD program at the University of Oslo has a distinct research component and educational component. Both need to be fulfilled to qualify for the PhD defense.

### **Q** AWARDS

**ECIP Oral Finalist** 2021

World Congress of Psychiatry Genetics

· Awarded to promising oral presentations from early-career researchers

2019 **International Training Grant** 

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**

Committee Member

2021

2020

2019

2014

NORMENT Early Career Researchers Meeting

- · Organising the conference for early-career researchers at NORMENT
- · Feedback with NORMENT leadership, the venue, and participants

**Committee Member** 2021

Norwegian Research School in Neuroscience

· Organization of the national conference for neuroscience PhD candidates

General Board Member (Fundraising portfolio) 2015

The Netherlands Red Cross Student Desk Zeeland

- · Coordination with regional and national Red Cross offices
- · Organization of first aid stations at local festivals and events

### ■ PORTFOLIO

present danielroelfs.com 2019

Personal website/blog

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

I only listed instances where I was invited for a position on a committee or an organization

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

### present 2019

### Talks & Presentations

danielroelfs.github.io/slides

- · Webpage where I collect all slides and files for talks, workshops, and presentations I've given since the start of my PhD
- · Among others slides for a number of conference presentations (link, link) and talk on the importance of design in science (link, link)

### present 2020

### Bilkollektivet Trip Cost Calculator

danielroelfs.shinyapps.io/bilkollektivet

· Interactive web app to quickly calculate and compare the cost of a trip with car-sharing service Bilkollektivet

#### 2020

### Virtual Open Science Escape Room

norment.github.io/ecrm20\_escaperoom

· Developed for scientists to learn about open science in a social setting

#### 2019

#### Introduction To Basic Statistics in R

For internal purposes

- · Gentle introduction to performing statistical analysis and plotting in R
- · Intended for NORMENT employees and other medical researchers

### 2019

### {normentR} R package

github.com/norment/normentR

- · R package for internal use at NORMENT
- · Contains function to simulate data for debugging and testing analysis and data visualization pipelines



### ■ SELECTED PUBLICATIONS

### 2022

### Genetic overlap between multivariate measures of human functional brain connectivity and psychiatric disorders

medRxiv

- · First author
- · Co-authored with a.o. Oleksandr Frei, Dennis van der Meer, Ole Andreassen, Lars Westlye, and supervised by Tobias Kaufmann

### 2021

### The genetic architecture of human cortical folding

Science Advances

· Co-author, first author is Dennis van der Meer

Full list of articles on which I am a (co-)author is available on my ORCID or Google Scholar profile

# Phenotypically independent profiles relevant to mental health are genetically correlated

Translational Psychiatry

- · First author
- · Co-authored with Dag Alnæs, Oleksandr Frei, Dennis van der Meer, Olav Smeland, Ole Andreassen, Lars Westlye, and supervised by Tobias