Joshua Sammet

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Education

M.Sc. Biomedical Engineering   *2021 - March 2024*
ETH Zurich
Scholarship: *Evangelisches Studienwerk e.V. Villigst*
Major: *Bioimaging*
Semester project: *Deep Learning-based 3D Registration of an MRI-Optoacoustic Image Dataset.*

Exchange student   January - June 2023
NTNU Trondheim

Visiting student   September - October 2022
University of Oxford
Semester project: *Inferring iron modality interactions using brain image based neural networks to predict blood iron levels in UK Biobank*

B.Sc. Computational Science & Engineering   *2017 - 2021*
ETH Zurich
Scholarship: *Evangelisches Studienwerk e.V. Villigst*
Thesis project: *Predictive Activity Change To Map An Area Of Interest*

Work experience

Department of Child and Adolescent Psychiatry, UPK Basel   *July 2021 - July 2023*
Research Assistant   *Basel, Switzerland*

- Preprocessing of dwMRI images and creation of connectomes from the FemNAT dataset
- Group-based analysis of differences in connectomes of conduct disorder patients & healthy controls

Jacobs Center for Productive Youth Development, University of Zurich *Sept. - Dec. 2021*
Research Assistant   *Zurich, Switzerland*

- PCA of multiple study questionnaires about psychological well-being during Corona

Jung Diagnostics GmbH   *October 2020 - May 2021*
Working Student   *Hamburg, Germany*

- Explored applications of neural networks to classify diseases in lung X-Ray images

Custom Solution Development, Capgemini Hamburg   *October 2020 - February 2021*
Intern   *Hamburg, Germany*

- Designed a platform to match available working students to open positions in project
- Implemented a fully functioning backend for the platform

Digital Circuits lecture   *September 2018 - December 2018*
Teaching Assistant   *Zurich, Switzerland*

- Planned and held exercise session during the term
- Corrected weekly assignments

Conference attendances

ESCAP 2023	Symposium presentation: *The connectomes of conduct disorder: Novel insight into the neurobiological mechanisms of CD?*
AAIC 2023	Poster presentation: *Inferring iron modality interactions using brain image based neural networks to predict blood iron levels in UK Biobank*

Extracurricular activities

Evangelisches Studienwerk Villigst   *May 2021 - May 2022*
Member of the student council   *Schwerte, Germany*
Represented the body of scholarship holders for one year. Responsible for communication between local student groups, within the scholarship organization and students of other scholarship organizations.

Evangelisches Studienwerk Villigst   *Feburary 2019 - March 2021*
Speaker of local scholarship holders   *Zurich, Switzerland*
Organized meetings of local scholarship holders. Communicated information from the organization and wellcomed incoming students.

Handball   *September 2013 - Present*
Referee
Refereed games in youth and lower adult divisions in Germany and Switzerland.

Technical skills

Programming Languages	Python, Git, Bash, R, Matlab, C++
Programming Tools	Machine learning (PyTorch), High-Performance Computing
Brain Imaging Tools	Freesurfer, MRtrix, GraphVar

Language proficiencies

German	Native
English	Fluent
Norwegian	A1