



Job opening: PhD / PostDoc Position (100%, 4 years)
“Machine / Deep Learning in Neuroimaging for Psychiatric Research”

We are seeking a highly motivated and talented individual to join our research team as a PhD student / Postdoc who would apply machine learning to substance addiction research. The successful candidate will have the opportunity to develop innovative and explainable machine/deep learning algorithms that can identify patterns and predictors of alcohol addiction and cannabis use disorder using structural brain MRI, Ecological Momentary Assessments (EMA), and psychometric questionnaires. A key aspect of this research will be accounting for confounding variables, such as age or comorbidities, to ensure robust and reliable results. This project is part of the TRR265 research consortium (<https://www.trr265.org/en>). The position will be in the lab of Prof. Dr. rer. nat. Kerstin Ritter (https://psychiatrie-psychotherapie.charite.de/en/research/translation_and_neurotechnology/machine_learning/).

Salary grade: TV-L E13 (100%)

Starting date: August 01, 2023, for ~ 4 years

Soft application deadline: June 25th, 2023

The position would remain open until filled.

Qualifications:

- Master's degree with excellent grades in Computer Science, Data Science, Statistics, Physics, Computational Neuroscience or a related field
- Experience with data analysis, visualization, and developing machine learning algorithms
- Strong programming skills in Python and PyTorch, and experience working with linux servers and GitHub
- Some prior experience with publishing research papers and working independently on open research questions
- Excellent written and oral communication skills

Ideal additional qualifications:

- Familiarity with developing explainable deep learning algorithms and benchmarking model performance
- Prior experience with psychiatric research
- Prior experience with neuroimaging
- Familiarity with analyzing healthcare data such as ecological momentary assessments and psychometric questionnaires
- Prior experience with publishing open-source research code

To apply, please submit:

CV with contact information of 2-3 references

Short motivation letter (max 1 page) mentioning the skills you can bring to this project

Master's / PhD degree transcript (if available)

Please send your application asap to Roshan Rane (roshan.rane@charite.de) and Kerstin Ritter (kerstin.ritter@charite.de).