Software Engineer
(m/w/d, 50% in Bern)
Admission immediately or upon agreement, duration 4 years

At the Support Center for Advanced Neuroimaging (SCAN, www.scancore.org), our goal is to investigate advanced neuroimaging technologies and to develop innovations for future clinical applications. We are passionate about transforming methodological developments into clinical practice.

As part of the project ‘ScanOMetrics – Open-Source Brain Morphometry Assessment for Clinical Routine Using Explainable Deep Learning’ funded by the Swiss National Science Foundation (SNF, www.snf.ch), we are recruiting a motivated Software Engineer for four years (50%).

In this project, we will leverage recent advances in deep learning based algorithms for segmentation and registration of T1-weighted brain MRI to develop an open source software that can be used for research and clinical purposes alike. Our focus will be on providing interpretable morphometric variables beyond cortical thickness and grey-matter volume as well as on quick and robust application in non-research settings.

Your Responsibilities
- Develop and support open source software based on existing lab code (bash, Matlab/Octave and R scripts, Python code)
- Work with researchers to optimize software pipelines
- Develop graphical user interfaces and tools for semi-automated reporting
- Create software releases
- Work in a multidisciplinary environment, continuously improve user experience
- A four-year commitment is strongly encouraged

Your Profile
- Bachelor's degree in Computer Science or higher education degree (university, university of applied sciences) in computer science or software development
- Strong programming skills in Python 3 (2 years or more)
- Knowledge in Linux OS and bash scripting
- Experience with version control applications (GIT) and OS-level virtualization (Docker or Singularity)
- Experience in Matlab or Octave scripting
- Fluency in English; German is a plus
- Experience with some of the following topics is also a plus: data analysis and visualization, R, UI/UX design, DICOM images

The package
- We are offering a position as a Software Engineer in a state-of-the-art research environment in one of the largest Neuroradiology Departments in Europe. The position is based at the Support Center for Advanced Neuroimaging, Inselspital Bern, Switzerland.
- Attractive work conditions (salary, vacation days, benefits, city)
- Prior knowledge of medical imaging is appreciated but not required: a desire to develop solutions to real-world problems is essential. You will work in an interdisciplinary team of physicists, biomedical engineers, computer scientists and medical doctors.
- The preferred start date is January 2022 or upon availability.
- We embrace diversity and equal opportunity. The official language at the Lab is English.

Contact
For more information, please contact
PD Dr. Christian Rummel (PhD), Senior Researcher, christian.rummel@insel.ch, Phone +41 31 6328038
Michael Rebsamen (MSc), Computer Scientist and Software Engineer, michael.rebsamen@insel.ch