

Job Description

Title: Software engineer - Bioimaging

Position: Permanent (100%)

Posted on: 14th May 2020

Location: Wyss Center for Bio and Neuroengineering, Campus Biotech, Geneva Switzerland

The Wyss Center for Bio and Neuro Engineering (<https://www.wysscenter.ch/>), a non-profit research organization focused on the translation of neurotechnology to clinical applications is seeking a talented and driven individual to join our growing international team of scientists, engineers and clinicians as a **Software Engineer in Bioimaging**. The Center is leading scientific projects involving collaborators from many different institutions around the world using a wide range of in-house microscope systems, producing large multidimensional datasets. Our success relies on our ability to perform high quality image processing and data analysis on these datasets.

As a member of the Wyss Center's data analysis team, the successful candidate will collaborate with staff at the Microscopy Facility and Advanced Lightsheet Imaging Center (ALICe) to organize, process and analyze data imaging datasets. This will require a candidate with a strong and proven track record in programming, algorithm development and bioimage informatics as well as an understanding of advanced microscopic imaging systems for neurobiology applications. The Software Engineer in Bioimaging will report to the Wyss Center Chief Technology Officer.

Key responsibilities

- Biological image processing and analysis on large microscopic datasets using a wide number of different software packages including Python, ImageJ, R, MatLab
- Develop image processing software and workflows using state of the art computer vision and machine learning approaches, including deep learning algorithms
- Work with Wyss Center scientists, clinicians and collaborating faculty to design and implement novel approaches of image analysis for translational neurobiology in nervous system disorders
- Effectively communicate research results to a wide range of researchers from computer science to life sciences
- Contribute to grant applications and other development activities
- Identify and effectively collaborate with biologists and other software engineers in data visualization, and data interpretation
- Survey existing literature and track emerging trends in image and data processing and development, prepare reports for projects and effectively communicate results

Required competence and experience:

- PhD in computer science, computer vision, bio informatics, bio physics, biology, neurobiology or a related discipline
- Excellent programming skills in Python, ImageJ, R, MatLab
- Demonstrated advanced knowledge of image processing and data analysis techniques and software packages
- Demonstrated advanced knowledge in Artificial Intelligence approaches especially Machine/ Deep learning algorithms
- Excellent programming skills and advanced knowledge of software project management
- Knowledge and familiarity with microscopy and imaging modalities
- Strong understanding of biology and the nervous system at various scales is a plus
- Proven track record in managing collaborative and interdisciplinary projects
- Problem solving oriented mind
- Ability to collaborate closely with colleagues and partners in a multicultural and multidisciplinary setting
- Excellent communication skills with the ability to integrate and work well within a multicultural team environment
- Ability to effectively communicate research results to a wide range of researchers from computer science to life sciences
- Fluent in English (both verbal and written)

To apply, please send your **CV and a covering letter** describing your qualifications and your motivations to HR@wysscenter.ch **no later than 30th June 2020**.