



Job Description

Title: Data Scientist for Neurotechnology applications

Posted on: 2nd September 2020

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

The Wyss Center for Bio and Neuroengineering (<https://www.wysscenter.ch/>), a non-profit organization focused on the translation of neurotechnology to clinical applications, is seeking a **Data Scientist** to join our growing, international team of scientists, clinicians and engineers. The individual will work both independently and collaboratively at the Wyss Center to gain a deep understanding of neural datasets and develop novel algorithms for closed loop control or diagnostic decisions in a range of clinical applications. The individual will report to a senior Neuroscientist.

Key responsibilities:

In his/her position, the **Data Scientist** will:

- Develop a deep understanding of data collected in preclinical and clinical trials, from various sources and modalities such as intracortical, intracranial, and imaging
- Generate mathematical models of cognitive processes based on experimental data
- Design, develop and optimize novel algorithms for real-time inference of cognitive states and intentions
- Employ state of the art machine learning tools to extract information both from large datasets (e.g. long term recordings, multiple channels and various recording modalities)
- Inform the design of preclinical and clinical experiments
- Work with hardware engineers to implement and deploy novel algorithms in next generation implantable and wearable devices, and on cloud servers
- Communicate methods and results internally, at conferences and in scientific journals
- Collaborate closely with scientists, engineers, product managers, clinicians and faculty at the Wyss Center and our collaborating institutions
- Help drive a positive, collaborative and translation-focused culture at the Wyss Center

Required competence and experience:

- Education in neuroscience, mathematics, computer science, physics, or related fields, with at least 5 years (BS) or 3 years (MS) of work experience in an industrial or academic setting
- Deep understanding of a wide range of tools and approaches for data analysis and ability to apply them in a principled way
- Demonstrated strong experience modelling complex datasets, preferably in the neural or medical domain
- Desire to understand neural processes and curiosity for novel approaches and applications
- Strong familiarity with Python or MATLAB, and their development & data analytics platforms
- Attention to detail and high quality work that can be disseminated to others





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- Aptitude for innovation, willingness and ability to drive change, passion for quality and continuous improvement
- Results oriented, with a strong sense of ownership, urgency, and drive
- Eagerness to engage and collaborate within multidisciplinary teams
- Strong written and verbal communication skills
- Fluency in English; French a plus

To apply, please send your **CV and a cover letter** describing your qualifications and your motivations to HR@wysscenter.ch. Applications received by **4th October 2020** will receive full consideration.

