





Two Postdoctoral Fellowships available at LREN, Department of Clinical Neurosciences, CHUV Lausanne. The positions are suitable for highly talented and motivated candidates with interest in AI applied to brain health. These positions will open from September 2018.

## THE POSITION

The goal of our project is to: 1. Develop generative models of brain anatomy and function to understand behavior in the normal and diseased brain and 2. Assess retrospectively and prospectively the clinical utility of AI and machine learning.

## Job description

- Developing Descriptive (Generative/ Bayesian statistics), Predictive (classification), and Prescriptive (unsupervised stratification) models for the normal and diseased brain.
- Scaling machine-learning solutions to hundreds of datasets (neuroimaging, genetic, behaviour, cognition, risk factors ...) towards automated benchmarking of multiple models.
- Building network based visualization and data exploration tools for further refinement and simplification of the models.

## Requirements

- PhD in computer science, statistics, math, or equivalent.
- Excellent programming skills including software design
- Previous experience in the field of Bayesian statistical modeling and longitudinal analyses.
- Previous experience in machine learning, deep learning and reinforcement learning.
- Expertise with Python library framework for data analyses (numpy, scipy, pandas, matplotlib) and machine learning (scikit-learn, tensorflow, keras, pytorch)
- Previous experience in neuroimaging is a plus

Please send a Letter of Motivation, CV and list of up to 3 referees to cedric.grolhier@chuv.ch latest July 15, 2018.

For more information, please contact:

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