

# Senior Software Engineer – Neuroimaging Analysis

## The Role

As a Neuroimaging Analysis Software Engineer, you will be responsible for designing, developing and maintaining important components of Pixyl's automatic brain image analysis software. You will join a dynamic and international team of talented people that strives to provide best-in-class medical image post-treatment tools, to help radiologists and neurologists better understand neurological pathologies and to accelerate the pace of clinical studies investigating associated treatments.

## Responsibilities

- Develop new modeling techniques (e.g. multivariate statistical frameworks) to describe neuroimaging data
- Develop machine learning systems that are scalable, reliable and interpretable
- Validate the models on large datasets
- Stay up-to-date of technological developments in your field
- Engaged in the full software life-cycle, including requirements gathering, highlevel design, coding, testing, debugging and maintenance
- Collaborate with team members to produce high-quality code that is robust, efficient and easy to maintain and extend
- Re-architect existing components to accommodate new requirements
- Participate in, and contribute to, design reviews, code reviews and project planning

### Qualifications

- Ph.D. with experience in neuroimaging
- Strong interpersonal and written communication skills
- Programming experience in C/C++ or Python
- Strong experience developing segmentation methods (statistical, machine learning ...)
- Nice to have experience with ITK or nipy libraries
- Knowledge of registration techniques
- Knowledge of open source neuroimaging software
- Experience with cloud environments (AWS, OVH, Google Cloud)

### Why Pixyl?

Pixyl helps clinicians and clinical researchers unlock important neuroimaging data to support confident decision-making in patient and clinical study management. A spin-out of INRIA and INSERM, Pixyl develops powerful AI to automatically extract biomarkers and clinical quantities of interest for stroke, MS, TBI, and neurodegenerative diseases.