Hiring a programmer for a brain imaging machine-learning library

We are looking for a programmer to join our research group, Parietal team, at INRIA, to work on nilearn a library applying advanced machine learning and signal processing to functional brain imaging.

As a programmer, you will be taking part to the NiConnect research project, developing tools for the analysis of "functional connectomes": brain connectivity infered using functional MRI. The project unites neuroscientists, data-miners, statisticians and clinical researchers to transfer recent advances in basic neuroscience to clinical diagnostic tools. Your duties will be to work hand in hand with the computer science and statistics researchers to turn the research code into a solid and well documented Python library usable by clinical researchers. In particular, to make the core data-processing routines more usable, the project will develop specific data visualization. The technologies used will rely on the scientific Python stack and scikit-learn machine learning library.

Requirements

- Programming skills in Python, preferably with experience of the scientific Python stack
- Understanding of quality assurance in software development: test-driven programming, version control, technical documentation.
- Software design skills
- Some knowledge of Linux/Unix
- Knowledge of open-source development and community-driven environments is valued
- Good technical English level
- Visualization and javascript skills are a plus
- An experience in statistical learning or a mathematical-oriented mindset is a plus

Speaking French is not a requirement, as it is an international team.

About the team

Working at Parietal is a unique opportunity to improve your skills in numerical computing and statistical data processing in Python. In addition, working on an open source stack, will give you premium experience of open source community management and collaborative project development.

INRIA is the French computer science research institute. It recognized world-wide as one of the leading research institutions and has a strong expertise in machine learning. You will be working in the Parietal team that makes a heavy use of Python for brain imaging analysis.

Parietal is a small research team (around 20 people) with an excellent technical knowledge of scientific and numerical computing in Python as well as a fine understanding of algorithmic issues in machine learning, statistics and image processing. Parietal is committed to investing in the scientific Python toolstack and its members are core developers in central projects such as Mayavi and scikit-learn, as well as the nipy library for NeuroImaging in Python and the nilearn library for machine learning applied to NeuroImaging.

Parietal is located in the Neurospin brain research facility, that hosts several brain scanners and research teams in neuroscience and medical imaging.

Contact Info:

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- **HR Contact**: Marie Domingues
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- **No telecommuting**
- **Fixed-term contract. Duration depending on the salary.**
- **Salary depending on experience**
- **Experience required: either some professional experience, or extensive open source contributions**