

DATA SCIENTIST in computational neuroscience

Profile

job-type	Research Engineer – expert in Big Data analysis
BAP	E
Mission	1/ The research engineer will analyze new brain imaging data (MRI) tackling the development of mental disorders in cohorts of children, adolescents, and adults followed up for years. The laboratory hosts international and regional multidisciplinary databases including thousands of participants. 2/ The engineer will help maintain the analysis softwares on the local network (e.g. SPM, FSL, Freesurfer...).
Main activities	The engineer task will use computational statistics methods to analyze the brain development in adolescence, and determine risk and protective factors useful for prevention, prognosis, or treatment monitoring, in syndromes such as depression, drug addiction, or autism. He/she will supervise students and advise the researchers. He/she will contribute to drafting and bringing manuscripts to publication in leading journals. He/she will establish collaborations with laboratories harnessing the data in Europe and US.
Other activities	2/ updates on softwares related to operating systems.
Requirements	Experience with brain imaging softwares (e.g. SPM, FSL, Freesurfer ...). Familiarity with Unix or Linux. Solid background in programming, especially in Matlab, R, Python... English : B2, C1, or C2
Other specificities	Experience in Big Data tackling with multivariate analysis methods (ICA, PCA), AI predictive analytics (e.g. machine learning techniques for classification, deep learning), or network analysis. The Engineer will deal with multiscale biomedical data. Location : University Paris Saclay ; Paris
Degrees	PhD Degree in computational statistics, engineering, or equivalent.

Laboratory

Lab Name Neuroimaging & Psychiatry

Head Jean – Luc Martinot, MD, Ph.D, DR1 INSERM

Lab description <https://www.inserm-u1000.u-psud.fr>

The INSERM U.1000 laboratory provides a stimulating scientific work environment as it involves a team of physicians and researchers trained to investigate juvenile or adult healthy subjects and patients with mental disorders. The INSERM Unit 1000 research activities are: -1/ at a research center in the heart of the Paris-Saclay expanding campus (<https://www.universite-paris-saclay.fr/en/vie-de-campus/amenagement>) hosting researchers, engineers, or technicians, where the U1000 team manages secure IT facilities devoted to the storage and analysis of sensitive “big data” samples from juvenile and adult participants (<http://www-centre-saclay.cea.fr/fr/Visite-guide-de-Digiteo>), -2/ The INSERM 1000 unit also carries out research among teenagers at the Salpêtrière hospital in Paris, and in a pediatric radiology department specializing in research in children and adolescents patients in the Necker pediatric hospital, Paris (Assistance Publique - Hôpitaux de Paris).

Address INSERM U1000 - DIGITEO Moulon – Bât. 660, Rue Noetzlin, 91190 Gif-sur-Yvette

Administration DR Paris 11

Contract

Type CDD (IR)

Duration **25 months** - Research Engineer (INSERM)

Salary INSERM - according to CV
Social welfare INSERM

Starting Date november 2018

Candidates should send a **CV**, a **statement of research interests**, and **potential references** to: jean-luc.martinot@inserm.fr