Information about the position:
The Signal Processing in Neuroimaging group at the Basque Center on Cognition, Brain and Language - BCBL (San Sebastian, Spain) offers a postdoctoral position to investigate and develop novel methods for the acquisition and analysis of neuroimaging and biomedical data. The position is funded for 2 years, plus 1 year based on the starting date and performance. The position is not linked to a specific project, and the candidate could work within any of the current research lines of the group, including:

- Developing advanced signal processing algorithms for the preprocessing, denoising, and analysis of functional magnetic resonance imaging (fMRI) with BOLD or ASL, as well as functional near-infrared spectroscopy (fNIRS).
- Advancing multi-echo fMRI techniques and their application.
- Developing translatable imaging techniques for measuring brain physiology and metabolism (e.g., cerebrovascular reactivity, neurovascular coupling, perfusion, calibrated fMRI) in both healthy subjects and clinical populations (e.g., brain tumors).
- Precision functional mapping ("Dense mapping") to investigate cognition and brain plasticity in individual subjects.

We also welcome other research proposals that can complement these topics.

https://www.bcbl.eu/en/research/research-groups/signal-processing-neuroimaging

Full-time (24/7) access to state-of-the-art neuroimaging facilities and equipment is readily available, including a 3T MRI Siemens Prisma scanner, MR-compatible EEG and eye-tracking Eyelink equipment, NIRx NIRScout fNIRS system.

Job description: The successful candidate will work with the PI and other members of the Signal Processing in Neuroimaging group and the BCBL. The successful candidate will be expected to develop an independent research program that complements the group's focus. Depending on the candidate's experience, s/he will also be involved in the supervision of undergraduate, master's and doctoral students working in the group.

Required skills:
- PhD in physics, computer science, biomedical or telecommunications engineering, signal processing, psychology, cognitive neuroscience, or related areas.
- Experience in the acquisition and analysis of neuroimaging and/or biomedical data, preferably functional MRI, ASL, or fNIRS.
- Solid programming skills (Python, Matlab, R, Shell scripting).
- Good knowledge of mathematics and statistics.
- Strong written and spoken English.

Application process timetable:

1) Deadline for application: November 30
2) Evaluation by committee: December 1 – December 5
3) Interviews: December 12 – December 22
4) Final decision: December 28

5)   Feedback to all applicants: December 28
6)   Work contract start date: As soon as possible in 2023