

Senior Computational Neuroscientist

Job description

Paradromics is looking for a team member to contribute to the preclinical and clinical testing of the key components of our neural implant system. The ideal candidate will collaborate with neuroscientists and engineers to develop innovative analyses of large-scale multiscale neural data and behavioral data, as well as advanced neural decoding and closed-loop neuromodulation algorithms. A background in electrophysiology is preferred, but not required.

This role involves interfacing with scientists, engineers, clinicians; excellent communication and interpersonal skills are crucial for excelling at this role. We are building next-generation brain implants to treat serious conditions in mental and physical health. If you want to use your skills in a positive, impactful way, if you like to be intellectually challenged, and if you want to be surrounded by smart, passionate co-workers, this work will be a highly fulfilling role.

Required Skills & Experience

- In-depth expertise working with neurophysiological (spiking and/or field potential) and behavioral data in sensorimotor or cognitive processes
- Experience developing algorithms for decoding and modulating large-scale neural population and dynamics (e.g., using dimensionality reduction, regression, state-space models, etc.)
- Experience manipulating, analyzing, and visualizing data in Python and/or Matlab
- Excellent written and oral communication skills
- Very strong analytical and debugging skills
- Ability to produce well-written technical reports and documentation
- Experience with scientific communication in peer-reviewed journals
- Working knowledge of signal filtering/processing fundamentals
- Ability to travel up to 25%

Preferred Skills & Experience

- Experience in electrophysiology in chronic animal models and/or human subjects (analysis techniques, denoising set-ups, using multiple data acquisition systems)
- Experience working with real-time brain-computer interfaces/neuromodulation devices
- Experience (e.g., surgical) in working with chronic, large animal preclinical models
- Surgical experience for electrode implantation
- Knowledge of Neuromodulation and Bioelectronic devices in the CNS
- Experience evaluating physiological data from novel instruments and/or sensors
- Experience in medical device industry or other highly regulated environment

Education

- BS or MS in Science or Engineering with 5+ years work experience or PhD in Biomedical Engineering, Neuroscience, or a closely related discipline

Paradromics is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

Qualified candidates should send cover letter and resume to HR@paradromics.com