

Job Title - Data Engineer

COMPANY INFORMATION - ALTO NEUROSCIENCE

Alto Neuroscience is a private company headquartered in the San Francisco Bay Area. Alto is developing a new generation of neural biomarker-based diagnostic tests and personalized treatments for use in psychiatry, based on a platform built from data aggregated at scale and proprietary artificial intelligence analysis tools. The team combines world-leading neuroscientists and business executives with experience commercializing products for the brain.

There currently is no objective way to diagnose psychiatric illness, nor to identify which treatment is best for an individual patient. Treatment selection is presently done by trial-and-error as there are no reliable blood tests nor objective brain measures, for example, that can inform these decisions. This results in clinical care that is highly inefficient and costly. Alto is focused on addressing this need through finding novel brain biomarkers that can define actionable subtypes of psychiatric illnesses, or inform the development and deployment of new treatments. To that end, we are building a platform capable of identifying a pipeline of new brain-based candidate biomarkers that can underpin new product opportunities.

ROLE SUMMARY - DATA ENGINEER

Under direct supervision of the chief technology and medical officers, the Data Engineer will complete programming tasks within a developing IT infrastructure surrounding 1) large-scale clinical and biomarker datasets and 2) incoming data from prospective clinical studies. Work will include developing data processing workflows, in matlab and python, for the following tasks:

- A real-time system for data management, quality control, pre-processing, feature extraction, and machine learning from a multimodal set of brain signals
- Automated deidentification and extraction of relevant signals from electronic medical records (EMRs)
- Correlating brain signals with clinical information using machine learning
- Work closely with Alto's data science and medical teams to deliver novel diagnostic and therapeutic solutions for brain health

ROLES AND RESPONSIBILITIES

- Build pipelines for brain signal-based prediction tasks and multimodal data analysis
- Develop visualization tools to interpret results
- Daily responsibilities will include algorithmic implementation, data analysis, coding/debugging, troubleshooting, health monitoring/alerting.

QUALIFICATIONS AND EDUCATION REQUIREMENTS

- Degree in Computer Science, Information Systems Management, Engineering, or other quantitative fields
- 1+ years of Python programming/development experience
- 1+ years of MATLAB programming/development experience
- 1+ years of machine learning experience
- Be a team player while being able to work independently
- Share a desire to improve mental healthcare delivery
- Coding experience in linux/CentOS environment
- Good to have: Cloud development experience, and EEG data analysis experience

If interested, please email info@altoneuroscience and let us know why you think you would be a good fit for the role.