



Signal processing engineer

Introduction

At GraphWear, we are on a mission to provide continuous medical diagnostics to every human. Without any needles or a doctor's appointment.

Headquartered in San Francisco, GraphWear is first addressing the global diabetic pandemic. We are eliminating painful and expensive blood glucose monitors with a continuous needle free glucose monitoring system.

Description

We are looking for engineers with experience working with physiological signals who are motivated to rid the world of needles. At GraphWear, you will join a multidisciplinary team and will work closely with our sensor team. Your role will primarily consist of conditioning the digital raw signals to maximize and extract the relevant information, maintain records of all the versions, and make incremental improvements. We are looking for someone willing to try and explore ideas before assuming they are impossible.

Minimum education / experience required

- Master's degree or higher in signal processing or equivalent field

The candidate must demonstrate experience in (2 years minimum):

- Denoising signals with minimal information loss using non computationally intensive digital filters (FIR, IIR) to enhance signal to noise ratio
- Detecting and correcting signal artifacts (edge effects from filtering, low and high frequency artifacts, transients, etc.)
- Predictive methods to improve estimation accuracy (including but not limited to Bayes, Markov, Kalman, Monte Carlo approaches)
- Cleaning up and conditioning unprocessed human physiological 1D signals obtained from wearable devices preferred (ECG, ECG, EMG, etc)
- Time series analysis, frequency domain analysis (Fourier transform) and time frequency characterization (wavelet, short time Fourier transform)
- Python 3 or equivalent

The candidate must demonstrate experience implementing the above in a real-time environment with limited computational resources. Please provide patents, published papers and / or access to your github or similar repository to showcase your skills.

Other job requirements

- Ability to think using first principles
- Excellent attention to detail and record-keeping skills
- A can-do attitude that will allow the individual to grow during their time at GraphWear
- Applicant must be able to work in the United States

Job type

Full-time

Apply

Send CV and cover letter to careers@graphwear.co