Jawbone

Senior DSP Engineer

As a Senior DSP Engineer at Jawbone Health in London, you will be responsible for developing bio-signal processing algorithms for low power and low bandwidth wearable sensors and cloud-based systems.

Essential functions:

• Research and develop algorithms to extract meaningful biomedical signals from raw sensor signals.

• Port said algorithms onto target system(s): low-power resource-limited embedded and/or cloud-based software.

• Solve firmware engineering problems related to signal processing on the embedded system.

• Optimize algorithms for various performance goals including accuracy, memory use, and power consumption.

• Assist the Product Design team in selection and validation of sensors and embedded computing resources.

• Collaborate with Q/A and Clinical Testing teams on data collection methodology and protocols.

• Develop solutions to optimize, test, and validate algorithms on large sets of collected data.

Competency:

• Extensive knowledge and experience in Digital Signal Processing.

• Linear filtering and frequency analysis: FIR, IIR, DFT, wavelets, etc.

• Properties of discrete-time signals: Z-transform, aliasing, etc.

• Adaptive filtering: LMS, Wiener, Kalman filters, etc.

• Real-time handling and processing of data: buffering, latency, jitter, etc.

• Knowledge of signal and noise statistics.

• Excellent software writing skills.

• Solid understanding of embedded systems firmware and hardware environments