

# Enhancing Human Health With Edge AI

Edge AI is revolutionizing the way we approach health and well-being. On-device intelligence can **transform health devices** with real-time insights, enhanced privacy, and extended battery life.

**Edge Impulse** provides all the tools you need to **make your devices smarter**, from stress detection to heart or glucose monitoring to smart alarms to sleep quality assessment.

Deploy to **any target** with algorithms optimized for **any hardware**, from high power GPUs down to the smallest wearable-enabled MCUs. Count with confidence from **prototype to production** and accelerate **time to market**.



Discover the  
Edge Impulse platform  
and get started today

Used by:  **Hyfe AI**

**POLAR**<sup>®</sup>

 **SLATE SAFETY**

## Edge Impulse Health Reference Design

A comprehensive hardware and software design solution:

- Health vital sensing
- Pre-built algorithms
- PPG/ECG/Temp/VOC sensors
- Accelerometer



# Transforming Wearables & Medical Devices

## The industry-leading health ML platform

We help companies scale and productize clinical grade Edge AI health devices and wearables, optimized for low power and cost.

**Build datasets at scale**

**Refine with advanced DSP**

**Generate powerful algorithms**

**Deploy to any hardware**

## Areas of Expertise

### Scale clinical trials

Proven infrastructure to reliably scale clinical studies from a few to thousands of subjects

### AI/ML on any health device

Deploy innovative algorithms to COTS hardware, cell phone apps, or any other device

### Continuously improve algorithms

Autonomously improve your algorithm with streaming data coming from users and new studies

### Speed up innovation

Accelerate your development with dedicated health solution expert support, slashing your time to market from years to months



### Navigating your FDA Pathway

Read our recommendations or ML best practices with FDA device approvals

## Product Features

Drive valuable health insights with diagnostic and predictive algorithms

**EKG/PPG:** Monitor heart health in real time

**EEG:** Capture brainwave patterns for comprehensive neurological assessments

**Motion:** Track movement and posture

**Temperature:** Monitor body temperature for health changes

**HRV DSP block:** Detect heart rate variation with PPG sensors

## Edge AI Advantages

Faster time to market, with higher accuracy, and lower cost

**Real-Time:** Instant feedback and insights

**Privacy boost:** On-device processing for extra security

**Low latency:** No cloud delays

**Offline Use:** Works anywhere, anytime

**Battery life:** Less cloud sync, more uptime, and longer life

**Personalized:** Tailored health recommendations

**High accuracy:** Reliable and actionable insights

**Behavior analysis:** Understand habits for better wellness