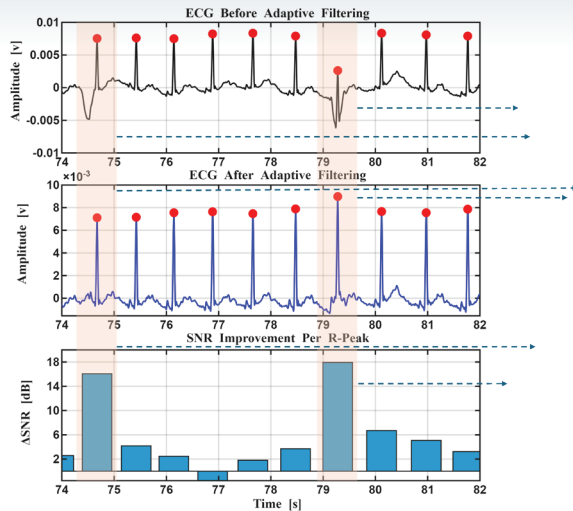
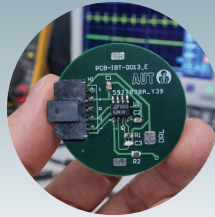


ECGware TECHNOLOGY

Our technology directly measures the cause of motion artefacts, including electrode impedance and triboelectricity. This enables us to 1) subtract many artefacts directly without corrupting the ECG, and 2) detect periods of clean signal with high certainty.



Motion Artefacts
Severely degrade
ECG signal quality

**Accurate ECG
Reconstruction**
Using our advanced
technique

**Up to 18 dB
SNR Enhancement**
In recovered
ECG signal

TECHNICAL ARTICLES:

Khalili, M., GholamHosseini, H., Lowe, A., & Kuo, M. (2024). Motion artifacts in capacitive ECG monitoring systems: a review of existing models and reduction techniques. *Medical & Biological Engineering & Computing*.
M. Khalili, H. GholamHosseini, and A.

Lowe, "Electrocardiogram Monitoring From the Neck Using Capacitive Electrodes," *J. Eng. Sci. Med. Diagn. Ther.*, vol. 9, no. 1, p. 011102, Feb. 2026, doi:10.1115/14068149.
Patent Portfolio: US 12011272 B2 (Granted), EP3965652 (Granted), AU

2025902748 (Filed), AU 2025906170 (Filed)
References: 1. Azeem, B. *et al.* Unmasking Arrhythmia Mortality: A 25 Year Analysis of Trends and Disparities in the United States (1999–2023). *Clin Cardiol* 48, e70109 (2025).

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COLLABORATION OPPORTUNITIES

We are actively seeking collaboration with healthcare providers, research institutions, and industry partners to accelerate clinical validation and real-world deployment. If you are interested in advancing ambient cardiovascular monitoring, we welcome the opportunity to connect.



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AUT INSTITUTE OF
BIOMEDICAL TECHNOLOGIES

Ambient Heart Rhythm Monitoring



25% of all heart-rhythm related
deaths occur in the home

Arrhythmia is associated with
137 deaths per 100,000 people.¹

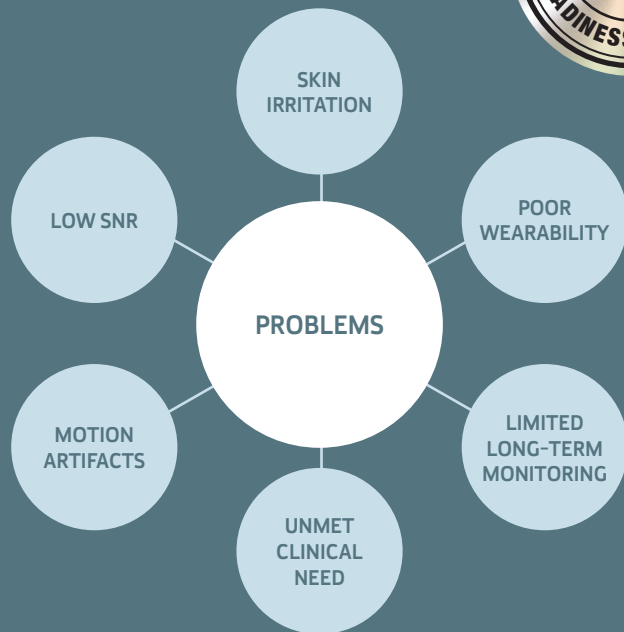


BRINGING HEALTH TECHNOLOGY TO LIFE

SOLUTION DEMONSTRATOR

The ECG Chair integrates motion-tolerant capacitive ECG sensing into a standard chair, enabling non-contact, heart-rhythm monitoring.

By combining advanced hardware design with advanced signal processing, the system delivers stable, research-grade ECG signals during natural sitting conditions.



Problem: Continuous ECG monitoring outside clinical environments remains limited by discomfort, motion artifacts, and poor usability. Conventional adhesive electrodes can cause skin irritation, reduce long-term compliance, and are impractical for everyday use. As a result, reliable cardiac monitoring in natural environments remains a significant unmet clinical and technological need.

POTENTIAL APPLICATION SCENARIOS

Ambient Patient Monitoring (Edge Care/Telehealth)

The ECG Chair is used for monitoring individuals at elevated health risk who spend extended periods seated, such as those who are convalescing.

Our technology allows continuous, passive ECG acquisition without requiring user interaction, enabling early detection and long-term condition management.



Office Wellness & Preventive Health

Measuring heart rhythm and stress-related and cardiovascular indicators in an office or home-working environment enables proactive management of wellbeing.

Heart-based breathing and mindfulness coaching is as easy as sitting down!



FOR HEALTHCARE PROFESSIONALS

Greatly reduced workload to review long ECG recordings – our technology directly identifies and eliminates motion artefact



FOR PATIENTS

Eliminates barriers to taking measurements: Adhesive-free, ambient sensing (e.g. furniture-integrated rather than wearable)



FOR HEALTH-TECH INNOVATORS

Patent protected technology platform can be adapted to **many forms and applications**