

Flexible & Wearable Electronics Application Experiments



Pepper Vally

www.peppervally.com

A brand & manufacturer that already for 10 years now produce high end fashionable clothing and accessories with an innovative way.



Problem to be solved

Integrate within a comfortable textile garment several sensors to measure both electrocardiography (ECG) and Photoplethysmography (PPG) to be able to measure optical and electrical parameters related to the heart and the blood system.

Solution provided by SmartEEs

Initially the prototype combined measurements of 1 Lead electrocardiogram (2 sensors), sweat humidity and body temperature for stress level evaluation of the wearer.

A first of its kind sustainable knitted electronic garment with monitoring services while same time having less impact to the environment and being skin friendly to the whole body-surface.

Business model & impact

Pepper Vally has developed a textile product that fully integrates a comfortable design, advanced knitting techniques and electrodes made with conductive natural fibres.

Pepper Vally integrates the electronics in their garment at their production site.

The electronic device made it possible to obtain ECG, heart rate variability and skin conductivity signals.

Initially aimed at the wellness market to provide users indicative information, there is also an opportunity for this solution to be deployed in a healthcare setting providing critical information on cardio performance.

