Flexible & Wearable Electronics Application Experiments

Madedesign Ltd

www.dynaback-tshirt.com

The purpose of the Dynaback arment is to lower muscloskeltal risk in thoseose working labour intensive jobs, by monitoring movements/posture and reporting abnormalities.

Problem to be solved

Through an array of invisible sensors, this smart t-shirt captures the dynamics of your body, processes the data, and sends the data via bluetooth to your smartphone. You receive instant feedback on your movement and posture. Dynaback suggests daily exercises to keep you toned and prevent back-pain.

Solution provided by SmartEEs

The assembly line developed in the project allows us to produce garments at a larger scale, with consistent quality. The quality measure was just to reduce the average build time (inclusive of re-work time) and because of the system that has been developed through this application experiment, this has been successfully achieved.

Business model & impact

Madesign attempts to put on the market a smart garment ("the Dynaback T-shirt") that is tracking the movement of its wearer and provides feedback on posture etc.

Currently the market for smart textiles (such as the Dynaback T-shirt) is growing, from occupational safety applications (Work & Safety) to fashion and sports. The Dynaback T-shirt could find its place here.

Long-term benefits:

Productivity – By reducing the chance for injuries and sick-leave, you can increase your performance.

Reduce Costs – Protect your colleagues and reduce your insurance, injuries and sick leave costs.

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