



## Automatización del Internet de las Cosas (AlfaIOT)

AlfalOT is a young Spanish company in process of expansion focused on providing new services to its environment using disruptive technologies. AlfalOT is a pioneer in the care of elderly and dependent people through devices that go totally unnoticed by their users

https://alfaiot.com



## Problem to be solved

The rise in the population over 70 years of age has led to an increased demand for specialized services for this population focused on improving their care and daily supervision. The main problems of this social sector are associated with their independence and mobility. Furthermore, these two factors jointly affect the self-esteem and health of the dependent population.

Flexible - FENPS detects psychomotor problems such as user falls, losses and relocations to those people or entities that take care of them and ensure their well-being and safety.

## **Solution provided by SmartEEs**

In order to integrate devices into the daily life of our seniors they must meet very high requirements in terms of ergonomics and simplicity of use. In order to meet these objectives, it was essential to integrate all the electronics on a flexible substrate, from microcontrollers to large-area pressure sensors.

After establishing the surface requirements for detecting user footprints, the development was established in 2 phases:

- 1. Characterisation of materials and generation of miniature prototypes
- 2. Testing and implementation of the full-size sensors.

## **Business model & SmartEEs' impact**

Thanks to SMARTEES, the developed product has been adapted to a value-added service for nursing homes and adult care centres. Different devices are being tested in a national reference centre for Alzheimer's care as a test in highly complex environments. In the same way, the maintenance needs and complexity of the installation are being evaluated to open up Flexible-FENPS to the markets identified as having the greatest impact. Finally, thanks to the collaboration within the programme, a new product branch in occupational safety has been incorporated.