

## Health Monitoring of Adults with Brain Diseases Using Shoe Pressure Sensors\*

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### Abstract

The use of digital technologies in combination with evidence-based medicine contributes to treatment efficiency and personalized patient intervention. The ALAMEDA project proposes monitoring solution for people with brain disorders by combining multiple sensors and specific applications. This paper presents the study realised in the ALAMEDA project of using a non-invasive method for patient monitoring to perform early detection of gait and balance problems in case of brain disorders. Thus, we used the smart insoles - Novel Loadsol - that measures plantar normal, are easy to use, acting as a Bluetooth-connected accessory. Evaluation shows how the smart insoles can be used by patients, data acquisition and visual data analysis that will be helpful for future automatic investigation.

**Keywords:** health; shoe pressure sensors; Loadsol; brain diseases