

Chapter Design of a Intelligent Crutch Tool for Elders

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Abstract

In the last few years physiotherapists has been treating the individuals by taking their decisions quickly which results in complexity, non effective and decrease in recovery rate in rehabilitation. Walking aids play a vital role in helping the patients in certain conditions, they lack balance and leads to complex usage of device. These type of aids helps for individuals suffering from spondylitis, disc bulging and postural In this proposed system we design a solution for patient using walkers, this device helps them to maintain the proper balance. As a proof of concept, we develop a sensors-based solution which can be easily embed where the walker helps to get real time information of the subject and helps in recovery rate. This device will automatically warn the users when they apply more pressure on a sensor using haptic feedback. To design a smart crutch tool for Elders and Accident patients which balances the force applied in terms of stress and strain to warn the patients by means of haptic feedback. Keywords Posture Correction Microcontroller Liquid Crystal Display Haptic feedback Force Applied

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