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## Capacitive sensing algorithm for elderly activity detection scheme indoor environment (Article)

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### Abstract

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The aim of this research is to assist elderlies in accomplishing their everyday tasks through facilitating their home atmosphere with sensors, actuators, and computational resources. A significant effort is needed to incorporate them to make them effective in daily life. Particularly, the tracking and detection of elderly people's daily tasks, associated with the information of the user's location in the home environment signify the key pillars of this work. The detecting and tracking algorithm uses the sensory data to indicate an associated situation in order to allow elderly people with special requirements. Monitoring the elderly's behaviour over a long period of time will allow prediction of their forthcoming alarming situation which allows the finding of the elderly's behavioural deviations in their everyday routine. The proposed resolution has been methodically assessed in the laboratory. © 2018 Institute of Advanced Engineering and Science. All rights reserved.

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