



Automated Monitoring System for Fall Detection in the Elderly

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Résumé en anglais Falls are a major problem for the elderly people living independently. According to the World Health Organization, falls and sustained injuries are the third cause of chronic disability. In the last years there have been many commercial solutions aimed at automatic and non automatic detection of falls like the social alarm (wrist watch with a button that is activated by the subject in case of a fall event), and the wearable fall detectors that are based on combinations of accelerometers and tilt sensors. Critical problems are associated with those solutions like button is often unreachable after the fall, wearable devices produce many false alarms and old people tend to forget wearing them frequently. To solve these problems, we propose an automated monitoring that will detects the face of the person, extract features such as speed and determines if a human fall has occurred. An alarm is triggered immediately upon detection of a fall.

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