

Elderly fall detection system device based on blood pressure abnormality

Abstract

Some of elderly people prefer to live independently and hence, choose to stay away from their children and relatives. Bad incidents could happen during the time for instance the elderly might be severely injured due to falling down. However, nobody else would notice and this may cause the victim to receive delayed emergency help. In serious cases, victims were found dead only after few days by the neighbours. To mitigate this issue, a fall detection system device for elderly based on their blood pressure is developed and presented in this paper. The developed device detects fall incident through accelerometer and pulse sensor reading as attached to the elderly body. If a fall incident occurs based on blood pressure abnormality, the device will promptly send an alert message to victim's emergency contact. This innovative development would alert people regarding bad incident happened on their love ones and thus, prompt emergency assistance can be provided.

Keywords

Measuring instruments, Blood pressure