Patent Search

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Abstract:

The presented invention is a system consisting of a smart wearable unit that senses and raise an alarm if a disabled person is in danger from physical inability. It is al track the physical activity and vital signs of the disabled people. This system includes a heart rate sensor to detect palpitations caused by dangerous situations pertai disable people. This heart rate sensor is coupled with a Bluetooth transmitter. The information is also transmitted to a mobile phone via Bluetooth connectivity. An a gyroscopes is integrated into the wearable band that is worn of the wrist of the disabled person. The array of MEMS gyroscope sensors are also integrated with their corresponding Bluetooth sensors. This gyroscope detects all the physical activities of the disabled person. It also detects when the disabled person is in a state of fati need of physical help. A microphone sensor is attached in the wearable device. Generic exclamations including 'help' and others are detected by the local computing wearable device along with the location data employing the integrated GPS module. GPS module is present to get the person's location when the alert signal is gener embedded system to which all sensors are connected has an inbuilt IoT module. Machine learning techniques are used to train the IoT based embedded unit for acc detection of dangerous scenarios by training with real world data.

Complete Specification

*Title: Wearable Health Care Smart Band for Physically Challenge People

*Field of Invention: Elderly People Healthcare

*Background Art including citations of prior art: There are no inventions similar to the one presented here for monitoring a disabled person's safety, vital signs and activity with the same set of sensors and software algorithmic approach.

*Objective of invention (the invention's objectives and advantages, or alternative embodiments of the invention): The objective of this invention is to monitor a disa person's safety, vital signs and physical activity with the same set of sensors and software algorithmic approach.

* Summary of Invention: The presented invention is a system consisting of a smart wearable unit that senses and raise an alarm if a disabled person is in danger fr physical inability. It is also used to track the physical activity and vital signs of the disabled people. This system includes a heart rate sensor to detect palpitations ca dangerous situations pertaining to disable people. This heart rate sensor is coupled with a Bluetooth transmitter. The information is also transmitted to a mobile p Bluetooth connectivity. An array of 6 axis gyroscopes is integrated into the wearable band that is worn of the wrist of the disabled person. The array of MEMS gyros sensors are also integrated with their corresponding Bluetooth sensors. This gyroscope detects all the physical activities of the disabled person. It also detects whe

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