**An Enhanced Fall Detection System for Elderly Person Monitoring using Consumer Home Network**

**ABSTRACT**

Various fall-detection solutions have been previously proposed to create a reliable surveillance system for elderly people with high requirements on accuracy, sensitivity and specificity. In this project, an enhanced fall detection system is proposed for elderly person monitoring that is based on sensors worn on the body and operating through consumer home networks. With treble thresholds, accidental falls can be detected in the home healthcare environment. By utilizing information gathered from an accelerometer, heartbeat sensors, the impacts of falls can be logged and distinguished from normal daily activities. The proposed system has been deployed in a prototype system as detailed in this project.

**Existing Work:**

In the existing work, the data capture from the various sensor and modules was transmitted to laptop, were a third party server was deployed which will transfer the data to the main server. It is a disadvantage as if server connection is down then no data can be accessed which will lead to critical condition of the person.

**Proposed Work:**

In the Proposed work, we will design and develop new system in which on system web server will gather the information and transmits over to the web page for viewing the data remotely including time to time update including the GPS Location of the person. If any abnormal values are detected then the system will call the necessary person and officials and updates the values.

**BLOCK DIAGRAM**

**Hardware:**

ARM 9/11, GPS, Wi-Fi Router, Heart Beat Sensor, Accelerometer.

**Software’s:**

Linux, **IDE:** QtCreator, **Language:** C/C++

**Applications:**

Residential purpose.

**Advantages:**

* Elder person safety
* Operating from Home or office.