180. CLOUD BASED ELDERLY PATIENT MONITORING DURING EMERGENCY USING WIRELESS BODY AREA NETWORKS-SURVEY PAPER

NabeenaAmeen
Assistant Professor, Information Technology
B. S. Abdur Rahman University
Chennai, India,nabjunaid@gmail.com

Monitoring the health of elderly patients continuously is a very difficult task for doctors. The development of Wireless Remote Elderly Patient Monitoring System has been quite intensive in the past decade. RPM (Remote Patient Monitoring) is highly dependent on the individual's motivation to manage their health. The continuous flow of patient data requires a dedicated team of health care providers to handle the information. RPM deployment is highly dependent on an wireless telecommunication infrastructure, which may not be available or feasible in rural areas. In addition, expert medical staff has restricted time and cannot monitor patients or collect additional data from patients at bedside. Thus, the proposal presents an innovative solution that addresses problems of integration, such as medical staff from one institution being able to monitor patients located at another. Many hospitals are sharing patient data on cloud as service. Hence in the present study, a new approach of Cloud based Wireless Remote Elderly Patient Monitoring system during emergency was proposed as a prototype to monitor the vital health data and needed drugs are prescribed. The heart rate, pulse, oxygen saturation, body temperature, lungs air volume and blood glucose level are measured. The ECG arrhythmia classification scheme is composed of data acquisition, feature extraction and normalization, feature reduction, and classification. A multi-class support vector machine (SVM)-based classifier is proposed. A particle swarm optimization algorithm is proposed to search for the best value of the SVM parameters and upstream by looking for the best subset of features that feed the classifier. Different types of arthymia is classified. Sensitivity, Specificity Accuracy is calculated. Priority ranking algorithm solves this problem by finding the highest weighted list of medical personnel to whom the alert SMS needs to be sent. In addition, a two-way audio/video communication link connects patients to their healthcare providers. In this paper, we present an extensive review of the significant researches associated with wireless patient monitoring using wireless sensor networks based on network issues and cloud based patient monitoring using wireless sensor networks and provoided description about the emergency department.

Keywords — QOS; RPM

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