

Artificial Intelligence Based Online Monitoring System for Cardiac Patient

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Abstract : Cardiovascular Diseases(CVD's) are the major cause of death in the world. The main reason for these deaths is the unavailability of first aid for heart failure. In many cases, patients die before reaching the hospital. We in this paper are presenting innovative online health service for Cardiac Patients. The proposed online health system has two ends. Users through device developed by us can communicate with their doctor through a mobile application. This interface provides them with first aid. Also by using this service, they have an easy interface with their doctors for attaining medical advice. According to the proposed system, we developed a device called Cardiac Care. Cardiac Care is a portable device which a patient can use at their home for monitoring heart condition. When a patient checks his/her heart condition, Electrocardiogram (ECG), Blood Pressure(BP), Temperature are sent to the central database. The severity of patients condition is checked using Artificial Intelligence Algorithm at the database. If the patient is suffering from the minor problem, our algorithm will suggest a prescription for patients. But if patient's condition is severe, patients record is sent to doctor through the mobile Android application. Doctor after reviewing patients condition suggests next step. If a doctor identifies the patient condition as critical, then the message is sent to the central database for sending an ambulance for the patient. Ambulance starts moving towards patient for bringing him/her to hospital. We have implemented this model at prototype level. This model will be life-saving for millions of people around the globe. According to this proposed model patients will be in contact with their doctors all the time.

Keywords : cardiovascular disease, classification, electrocardiogram, blood pressure

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