Abstract

Heart is one of the most important organ in human. Heart damage or failure has a very fatal impact. Abnormality of human heartbeat is called arrhythmia. One way to diagnose arrhythmia is electrocardiogram (ECG). ECG is a heartbeat diagnosis method which records the physiological activity of heart using electrodes on the skin in certain unit of time. Several feature extraction and classification method are used to determine the types of heartbeat which belong to the arrhythmia. In this final task, Deep Belief Network (DBN) is constructed using Stacked Restricted Boltzmann Machine (RBM). The constructed system is able to extract features and classify ECG data with best accuracy 91.939%

Keywords: Classification, ECG, Arrhythmia, Deep Belief Network