324. RECOGNITION OF HUMAN EMOTIONS USING ECG SIGNALS

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Human emotions play a dynamic role in people's everyday life. It is a mental state and does not arise through a free will. It is often accompanied by the physiological changes. Therefore it is important to monitor these changes because it contains information about different kinds of emotions. In our research work, emotion recognition through ECG signal is established because it contains true information's and also it provides smooth interface between the human and computer. Filtering is performed using low pass, high pass and derivative filters in order to remove the noise .An efficient dynamic compression scheme is proposed to deal with the challenge of ultralow power and real-time wireless ECG application. The SPIHT technique is based on the use of wavelet transform which is very well suited to locate the energy of the signal in fewer coefficients, features like entropy, correlation, cluster performance, cluster shade etc., are calculated and next stage is classification which is based on Fuzzy Support Vector Machine(SVM). This method works better than SVM because, This technique compares the training and testing data not only the simple thresholding but also based on the more features for the comparison. The proposed method achieved improved recognition accuracy for subject-independent classification.

Keywords- Electrocardiogram, Hierarchical Trees, Support Vector Machine.

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