



## **WAVELET BASED ANALYSIS OF ECG SIGNAL FOR THE DETECTION OF MYOCARDIAL INFARCTION USING SVM CLASSIFIER**

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### **ABSTRACT**

This paper introduce a new technique for automatic and accurate detection of heart attack which is also known as Myocardial Infarction. The ECG signals may be corrupted with different types of noises. So an efficient noise removal technique is inevitable. In this paper, we use a denoising technique using wavelet transform which aims to estimate the signal of interest from the composite signal. Features are extracted using polynomial fitting algorithm and classification of ECG beats is done by using an SVM (support vector machine) classifier. The proposed algorithm is capable for automatic detection of heart attack and also improves the classification quality.

**KEYWORDS:** Myocardial Infarction, Wavelet Transform, Polynomial Fitting, Support Vector Machine