

Abstract

Mechanomyography (MMG) is a mechanical signal from piezoresistive-based sensors used to read pressure, sound and others. MMG is an alternative to Electromyography (EMG), the main advantage of MMG compared to EMG is that signal will not affect the skin of the elderly. Until now, research has rarely used MMG signals, especially in the leg muscles and uses piezoresistive-based sensors, and rarely studies of classification algorithms that use MMG signals. Therefore, this final project will conduct a study for the MMG signal classification algorithm in leg muscles. Prototype will be built to record leg muscle MMG signal in real-time. The highest accuracy produced in this study using the KNN classifier is 84.99%. Meanwhile, the SVM algorithm produces an accuracy of 77.56%

Keywords: classification, *mechanomyography, electromyography, piezoresistive, flexiforce, knn, svm*