

ABSTRACT

Increases the incidence of shootings in Indonesia making the firing detection system judged necessary. In this research we will develop gunshot detection system using Spectrogram Image Feature (SIF) extraction method and Support Vector Machine (SVM) classification to prove system performance in environmental noise condition in real condition ie human activity. The sounds used are sounds that have signal-to-noise 5dB, 10dB, 20dB and 30dB (Clean) signal variance and are categorized into 2 conditions, namely indoor and outdoor noise. The SIF method obtains a recall performance value of 0.76 and a precision of 0.43 under sound conditions with a signal-to-ratio of 20dB. The indoor noise conditions have better performance results than the outdoor.

Keyword : *Gunshot, Spectrogram Image Feature, Detection, Support Vector Machine, Feature Extraction*