

# Evaluating the effect of voice activity detection in isolated Yoruba word recognition system

**Authors(s):** AM Aibinu, MJ E Salami, Athaur Rahman Najeeb, JF Azeez, SM Ataul Karim Rajin

## Abstract

This paper discusses and evaluates the effect of voice Activity Detection (VAD) in an isolated Yoruba word recognition system (IYWRS). The word database used in this paper are collected from 22 speakers by repeating the numbers 1 to 9 three times each. A hybrid configuration of Mel-Frequency Cepstral coefficient (MFCC) and Linear Predictive Coding (LPC) have been used to extract the features of the speech samples. Artificial Neural Network algorithms are then used to classify these features. An overall accuracy of about 60% has been achieved from the two proposed feature extraction methods.

**Keywords:** Speech recognition, Feature extraction, Speech, Mel frequency cepstral coefficient, Artificial neural networks, Accuracy, Training

**DOI:** [10.1109/ICOM.2011.5937134](https://doi.org/10.1109/ICOM.2011.5937134)

2011 4th International Conference on Mechatronics (ICOM)

**Published by:** IEEE, On 2011/5/17