Abtract

Speech recognition is a popular technology which is well known in every single person today. Its has been applied in nearly all fields. Health, machinery, computerization is the area of implementation of this technology. The performance of speech recognition, can be decreased due to the influence of the input sinyal is exposed to noise from the surrounding environment. Ideally the system works well on noise-proof environment, because the smaller the exposure to noise, the better the response given by the system. However, in the implementation of the field, most speech recognition technology is applied in environment ain't completely impervious to interference noise. This makes the method of minimal noise continue to be developed to improve the quality of system performance.

Refer to the problems above, appear many developing method to improve speech recognition performance by reducing the influence of noise exposure. One of that method is called the Non-linear Feature Extraction Harmonic demodulation. The basic concept of this method is to reduce the spectrum harmonic which is vulnerable to the additive noise.

As appear from the experimental results, a system which uses non-linear harmonic demodulation method shown a good number in reducing noise on the sinyal presented. Parameters used in this study is Correlation, which works by comparing the features of the system output with clean features and degrees sought proximity system output.

Keywords: Harmonic Demodulation, Speech Recognition, Spectrum, Noise, Feature Extraction, Correlation