

## ABSTRACT

Every language speaks by human has a unique characteristic. These characteristics have more variation when the speech produced from different mouths. The solution to this problem is a technology (speech recognition) that can recognize the variation of speech so everyone able to recognize it.

On this final task there are two main processes: feature extraction and feature selection. LPC will be used to produce the feature for speech recognition. The feature selection will be optimized by genetics algorithm (GA) and this result will be used for classification process.

This system can recognize input pattern and makes decision in order to get the mean accuracy 79.64%.

Keyword: *feature extraction, feature selection, GA, LPC, speech recognition*