

## **ABSTRACT**

*Language is the way humans communicate, language itself consists of two kinds, namely verbal and non-verbal. Verbal uses spoken while non-verbal uses signs. Language is also applied in playing music, especially angklung. By designing a sign language translator system playing angklung music will be easier to understand.*

*The hand signal translation system is based on a flex sensor, which is a sensor that detects a voltage difference when the sensor is bent. Sensors are attached to the gloves on the fingers, and then the results of the measurements will be translated and displayed, so that players and musical accompaniments can play angklung well.*

*In this final project, the authors get the results of the accuracy of the tool which is quite accurate with an average of 70% and a delay of 200 milliseconds to be displayed on the LCD. The result of the translation on the LCD is a word that indicates the system can read the sensor value. Testing the movement of the angklung tone got the lowest result of 70% and the highest of 80% with a tolerance on the flex sensor of 30%. The factor that reduces the accuracy of the tool is when the flex sensor sometimes had a voltage difference from what has been determined when it is bent.*

**Keywords:** *hand signals, angklung, flex sensor, symbol notation*