

## **ABSTRACT**

In recent years, there has been a sensory phenomenon that has escaped the attention of scientific research but is well known to many. This phenomenon is called the Autonomous Sensory Meridian Response or commonly known as ASMR. This phenomenon has not been studied before especially by today's technology. People believe that ASMR can reduce depression and stress. For people who feel ASMR will feel static throughout the body, scalp, back of the neck in response to audio and visual stimuli from ASMR. This study identified ASMR triggers that people usually do. Namely whispers, personal attention, and the voice of Crips. The resulting voice signal is represented by the Linear Predictive Coding (LPC) feature.

This final project will use the K-Nearest Neighbor (K-NN) classification method. This method will be tested with objects based on learning data whose characteristics are closest to the object. Several characteristic rules on K-NN also affect the accuracy of the test system. K-NN also has the advantage that it is easier to understand, implement and computationally more effective, simpler and better grouped.

The purpose of this study is to classify the sound of the ASMR generator based on the parameters that are sought for the best accuracy in the system. The test results show that the highest accuracy obtained is 71.11% using 6 LPC statistical features namely Mean, Variance, Standard Deviation, Skewness, Kurtosis, Entropy and using Distance Cityblock on K-NN from 90 training data and 45 test data. The parameter for classification using K-Nearest Neighbor (K-NN) is the K parameter with a value of 3 (one) with Cityblock distance.

**Keywords:** K-Nearest Neighbor (K-NN), Linear Predictive Coding (LPC), Autonomous Sensory Meridian Response (ASMR)