ABSTRACT

Noise is an unwanted sound and can interfere with the comfort of the

surroundings. The noise is usually expressed in units of dB (decibels). In the

educational environment limits the index suggest that voice is around 55 dB.

Usually the occurrence of noise are difficult to be known for sure, hence in this final

assignment will be made a noise detection monitoring system that can find out

where is the position as well as the accuracy of the source of the noise. This system

will be using sound sensor Df Analog robot V2. Then the existence of a WiFi Shield

allows systems to communicate with each other with the microcontroller so that it

will show warning to the user through an application, for the determination of the

direction of the sound source using the method of K-Nearest Neighbor (KNN). From

the experiments, the user will be able to get a warning associated with the noise

that occurs in an area at once with the precision position of the noise source that

occurs with an average success rate of 70.56%.

Keywords: Noise Sources Detection