

## **ABSTRACT**

Emotions are one of the body languages that involves many aspects such as behavior, actions, thoughts, and feelings. Emotions take many forms. Emotions can also be used as a medium for implicit messaging. However, sometimes humans cannot define the meaning of these emotions, especially in children. Parents often feel confused due to emotional changes in their children, so they are confused about how to deal with emotions in children.

There are so many ways to find out the emotions of a children. one of which is by classifying emotions based on facial expressions and body gestures. This classification method can use the K-Nearest Neighbor algorithm by using a dataset that has known emotional classes based on attributes and sample data from training data. In this data, a dataset from EmoReact is used which contains data on children's expressions which include several expressions such as happy, sad, afraid, angry, and neutral.

The result of this study is that K-nearest Neighbor algorithm result in training model get 99.89% and can classify emotion in children with an accuracy 45%.

Keyword : Emotions, Classification, Expression, K-nearest Neighbor