FACE EXPRESSION CLASSIFICATION SYSTEM USING CONVOLUTIONAL NEURAL NETWORK METHOD

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ABSTRACT

In essence, the human face displays a lot of diverse information such as identity, gender, age, race and one of them is facial expressions. Facial expression is a form to express or express an emotional state. Facial expressions themselves have several types such as neutral, sad, happy, angry, surprised and disgusted expressions. Of the several types of facial expressions, it is the shape or position of the facial muscles in the nose, mouth, and eyes. Facial expression recognition is very useful in business or marketing, because by using facial expressions we can find out customer satisfaction based on the type of expression shown, therefore a system is made that is able to recognize customer satisfaction based on facial expressions shown. It is hoped that this research can be used to detect customer satisfaction based on the type of facial expression. This is the basis of reference for this study, so in this study the researchers took the topic of classifying facial expressions using the Convolution Neural Network (CNN) method. This application uses 290 training data and 14 test data. The level of accuracy generated by the system is 57.1%.

***Keywords**: Facial Expression, Convolutional Neural Network (CNN), Emotional*