IMPLEMENTATION OF CONVOLUTIONAL NEURAL NETWORK ALGORITHM FOR CLASSIFICATION OF HUMAN FACIAL SHAPE

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ABSTRACT

The Convolutional Neural Network (CNN) algorithm is a type of machine learning algorithm that is widely used in the field of computer vision, including in the classification of human facial shapes. CNN consists of several convolution layers, pooling, and fully connected layers. The aim and benefit of this research is to implement the CNN method to classify facial shapes and determine the accuracy of this method. Apart from that, the benefit of this research is that it helps someone find out the shape of their face, helps someone determine the shape of their haircut, determine the shape of their glasses and determine their make-up style. The results of this research obtained an accuracy of 98.37% for training data and 72.01% for testing data. By using this facial shape classification system, both women and men can find out what face shape that person has. Even if there are obstacles in the way such as glasses or a veil.

Keyword*: Convolutional Neural Network (CNN), Face Shape Classification, Machine*
Learning, Computer Vision