Implementation Of Deep Learning Method For Arabic Vocabulary Recognition On Students Of Mts Darun – Najah

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ABSTRACT

Arabic vocabulary recognition is an important aspect of learning at MTs Darun -Najah, a school that emphasizes on Islamic religious education. This research proposes the application of Convolutional Neural Network (CNN) and EfficientNet B7 to create learning media for Arabic vocabulary recognition for students. This method is implemented in the form of a web-based application. The built application offers an innovative approach in learning by utilizing deep learning. The results of several trials conducted showed that the application of Convolutional Neural Network (CNN) and EfficientNet B7 achieved 90% accuracy with an average precision of 94.6%, recall 94.6%, and f1-score 94.6%. Tests using User Acceptence Testing (UAT) have a success accuracy rate of 87.2% which proves that users can accept quite well.

Keywords: Convolutional Neural Network (CNN), EfficientNet B7, Arabic Vocabulary Recognition, Deep Learning