ABSTRACT

Reading is a basic skill that is mandatory in language and communication in everyday life. To be able to read, of course we must also be able to recognize the letters of the alphabet. The alphabet consists of 26 letters, each letter has a consonant vowel sound. According to the Ministry of Education and Culture, 2.07% cannot read and pronounce each letter of the alphabet. Current technology systems, can be used to practice and pronounce the pronunciation of the alphabet through voice recognition with. The purpose of this final project research is to make an application to recognize letters as a medium for children to practice and pronounce the letters of the alphabet fluently by applying the Convolutional Neural Network method for speech recognition. This application has succeeded in helping children pronounce letters quickly and accurately in pronunciation and the Convolutional Neural Network (CNN) method is used as a training process and also produces special characteristics in the alphabet. The result of the level of accuracy in this study with the convolutional neural network method is 88.20% with an epoch of 300 and a learning rate of 0.002, for the level of satisfaction and user needs in the application is 89.45% based on the results of the questionnaire.

Keyword: Application Mobile, Alphabet, Voice Recognition, Convolutional Neural Network.