World Academy of Science, Engineering and Technology International Journal of Electrical and Information Engineering Vol:12, No:02, 2018

Makhraj Recognition Using Convolutional Neural Network

Authors: Zan Azma Nasruddin, Irwan Mazlin, Nor Aziah Daud, Fauziah Redzuan, Fariza Hanis Abdul Razak

Abstract: This paper focuses on a machine learning that learn the correct pronunciation of Makhraj Huroofs. Usually, people need to find an expert to pronounce the Huroof accurately. In this study, the researchers have developed a system that is able to learn the selected Huroofs which are ha, tsa, zho, and dza using the Convolutional Neural Network. The researchers present the chosen type of the CNN architecture to make the system that is able to learn the data (Huroofs) as quick as possible and produces high accuracy during the prediction. The researchers have experimented the system to measure the accuracy and the cross entropy in the training process.

Keywords: convolutional neural network, Makhraj recognition, speech recognition, signal processing, tensorflow

Conference Title: ICSSP 2018: International Conference on Statistical Signal Processing

Conference Location : Dublin, Ireland **Conference Dates :** February 15-16, 2018