

ABSTRACT

JAVANESE – LATIN TRANSLITERATION BASED DETECTION MODEL USING CONVOLUTIONAL NEURAL NETWORK

Author

Asti Dwi Sripamuji 19102006

Language is a tool for conveying ideas and thoughts. The writing and representation of language is indicated by certain letters/characters. The script from one region to another in Indonesia has its own characteristics. Javanese script is one of the regional scripts that has a complex way of writing. An automatic Javanese script detection model is needed so that the introduction of Javanese characters can be done easily. The detection model was built in this study where the model can change the image of the Javanese script into the Latin text. The literature review stage led the researcher to find a Javanese script detection model which was still limited to a single character. In addition, the researchers also found that the regional character detection model gave a small accuracy score. This study intends to build a detection model for Javanese script that is equipped with sandhangan automatically using one of the deep learning algorithms, namely the Convolutional Neural Network. The research results obtained, the Conv2D model (64, 32, 16) has superior performance as indicated by an training accuracy of 99.87% and testing accuracy of 89%.

Keywords: Javanese Script, Detection, Deep Learning, Convolutional Neural Network