

EMOTION RECOGNITION VIDEO DATABASE DEVELOPMENT FOR JAVANESE LANGUAGE

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ABSTRACT

One of the uses of technology that many researchers are currently developing is the automatic detection system to recognize human emotions. The recognition of human emotions can be used for various things, for example, in the fields of Health and Education. Many studies have been conducted to develop human emotion recognition systems based on human facial expressions based on images. However, in some cases, pictures on human emotion recognition systems are less effective. Based on these, several studies regarding the design of emotion recognition systems are still being developed using other data objects, one of which is video-based emotion recognition. Most research on the development of video-based human emotion recognition systems still focuses on common languages, such as English. There are still not many developments of emotion recognition systems in particular languages such as Javanese. Seeing this, the research in this proposal aims to develop a video-based human emotion recognition system based on the Javanese language.

The research method used is research and development (R&D) which is carried out to develop databases that can be used for new product engineering. This research will produce a video database for emotion recognition in Javanese language. In detail, the phases in the development method include (a) literature review, (b) recording process, (c) filtering and data cutting (d) creating design, (e) testing, and (f) implementation. The development of the detection system algorithm is carried out by the Convolutional Neural Network (CNN) algorithm. Meanwhile, the classification method used is based on deep learning. System testing is carried out using the k-fold cross-validation method by dividing the dataset into training data and test data.

Kata Kunci: *emotion, video, Javanese language, deep learning*