AUTOMATIC SIGN LANGUAGE TRANSLATOR SYSTEM USING DEEP LEARNING MODEL CONVOLUTIONAL NEURAL NETWORK METHOD

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ABSTRACT

Bisindo can be interpreted as a terminology used to refer to the natural sign language used by the deaf community in Indonesia. Bisindo functions as a tool to communicate using lips and body language, including facial expressions and eye gaze. According to research from the WHO, more than 5% of the world's population or 466 million people have hearing loss and is expected to continue to increase. While it is undeniable that generally sign language is difficult to understand by the wider community and makes the deaf community feel alienated in their environment. Therefore, the researcher created a system with the title "Automatic Sign Language Translator System Using Deep Learning Model Convolutional Neural Network Method". This research was conducted with a computer vision-based approach that uses a camera to capture sign language movements.Then carry out the process of collecting datasets, making training data models and image classification. The results of this study indicate that the training data has a test score of 0.4% and a test accuracy value of 99%. The analysis on the training data model that has been made by the researcher is categorized as NOT input-bound because only 1.3% of the total sample time is waiting for input. So it can be said that the model already has good efficiency.

***Keywords** : Sign Language, Bisindo , Deep Learning, Convolutional Neural Network*