

Sign Language Recognition System to Text Using Convolutional Neural Networks (CNN).

Nguyen Viet Quang

Abstract: This topic focuses on developing an automated system to convert sign language images into text through the use of a Convolutional Neural Network (CNN) model. The context of the topic is established based on the increasing need for communication between hearing individuals and deaf individuals, particularly in schools and communities. The objective of the research is to build a system that can effectively process sign language images through the training and optimization of a CNN model. The research method combines theoretical exploration of neural networks with experimental application deployment. Through this, the topic is expected to make a significant contribution to expanding communication capabilities for deaf and hard-of-hearing individuals, while also providing a useful solution for research in the fields of image processing and machine learning.

Keywords: Sign language, Convolutional Neural Network (CNN), Natural Language Processing