# ABSTRACT

*Sign language is a language that is conveyed through body movements. Sign language is used by deaf and speech-impaired people to communicate. In Indonesia, there are two types of sign language, namely the Sistem Isyarab Bahasa Indonesia (SIBI) and the Bahasa Isyarat Indonesia (BISINDO). The use of sign language does not have widespread use in society. This limits communication between people with disabilities and non-disabled people.*

*This final project research creates a system that makes it easier for non-disabled people to learn sign language. This system applies the Single Shot Multibox Detector (SSD) method. This method is used to detect the movement of the Sistem Isyarat Bahasa Indonesia (SIBI) alphabet in real time. The way it works is by using the camera on the laptop device, which will detect movement, and the results will be displayed on the web.*

*The model used was successfully tested using hyperparameter configuration testing. The test results with the most optimal values are on the dataset with a ratio of 90%: 10%, learning rate 0.04, epoch 300, batch size 4, and step 40000 with 100% accuracy, mAP@.50IoU results 100%, and AR.@100 which is 91.79%.*

**Kata Kunci:** *Single Shot Multibox Detector*, *Hyperparameter, Real Time.*