

Paper Title:

Helping Hearing-Impaired in Emergency Situations: A Deep Learning-Based Approach.

Paper Link:

<https://ieeexplore.ieee.org/abstract/document/9681062>

1 Summary**1.1 Motivation**

This paper helps speech and hearing impaired by recognizing sign language.

1.2 Methodology

They utilised two models for the classification task, Model I and Model II. Model I consists of 3D CNN, while Model II uses a combination of pre-trained CNN and LSTM. Model III, an object detection model, is based on the YOLO (You Only Look Once) v5 algorithm for detecting hand gestures.

1.3 Conclusion

The best classification model uses a combination of pre-trained VGG-16 and LSTM, while the detection model is based on the YOLO v5.

2 Limitations**2.1 First Limitation**

Different skin colours and various lights can cause an effect on the result.