

**SIGN LANGUAGE CONVERTER – CONVERTING
SIGN LANGUAGE TO TEXTS IN REAL TIME**

M.R. Nisal Manjitha Muthugala

A dissertation submitted in partial fulfilment of the requirement for Bachelor of
Engineering (Honors) degree in Software Engineering

**Department of Computing
Informatics Institute of Technology, Sri Lanka
in collaboration with
University of Westminster, UK**

2020

Abstract

Sign Language Conversion is a widely discussed topic in the software development industry in past years. This can be used to improve the communication between the deaf people and normal people who did not know Sign Language. Due to the lack of knowledge on Sign Language, there is a considerable communication gap between these people. That leads to the social isolation of deaf people. This can affect more if the deaf person is a kid. Even the young people with hearing disabilities facing issues when it comes to applying a job and working on the job. When its compared to the job market available for normal people, the job market is low for the people with hearing disabilities

So, the solution is to minimize the communication gap is, creating a software to convert sign language to texts and display it to the other person. This software is creating by using Image Processing and Natural Language Processing. First the sign language gesture captures and identify by processing it. Then it used to create sentence using NLP and display it to the user in Graphical User Interface.

Keywords: Image Processing, Natural Language Processing, American Sign Language, World Health Organization, Graphical User Interface