**II. LITERATURE SURVEY**

There are several strategies that come out in existing studies to enhance the ability of the disable people’s feelings for the society and we inherited some of the properties for these papers which are pre published some of them are

Advancements in Indian Sign Language Recognition Systems – 2023

*From this we understood ISL grammar for better model development.* Indian Sign Language Recognition Using Mediapipe Holistic – 2023

*Inspired about the ISL tools and more of them A Comparative Analysis of* Indian Sign Language Recognition Using Deep Learning Models -2023

*Took the dataset from them which is very good one for ISL language*.

Real-Time Indian Sign Language Recognition System -*2018*

*Extracted grid-based feature from this project.*

Indian Sign Language: A Linguistic Analysis of Its Grammar -2018

*This contains the best performing deep learning model*

Indian Sign Language Recognition – A Survey 2013

*Checking and verifying CNN and LSTM for ISL gesture recognition. By this model we got to know how can we use gesture recognition and all with including their dataset*.

A Review on Indian Sign Language Recognition – 2013

*In this we learned to classify into different thing in ISL language.*

Towards Performance Improvement in Indian Sign Language Recognition – 2020

*This contains of high accuracy methods and this system give accuracy of 99.6% for sign language to text language or speech.*

Indian Sign Language (ISL) Biometrics for Hearing and Speech Impaired Persons -2017

*Used different ISL gesture recognition for finding all the patterns and methods in ISL language*.

Vision-Based Hand Gesture Recognition Using Contour Analysis for ISL – 2014

*Used contour analysis for hand gesture recognition, which explores vision-based approach in ISL recognition*.

A Real-Time Indian Sign Language Recognition System Using Deep Learning – 2019

*Used deep learning model to implement in real time with high accuracy*.

Sign Language Recognition Using Kinect Sensor – 2015

*Used sensors to evaluate the data based on sensors recognition for ISL language*.

Hand Gesture Recognition for Indian Sign Language: A Hybrid Approach – 2017

*Used hybrid method technology for recognition of ISL*.

Deep Learning-Based Indian Sign Language Recognition System – 2021

*Used Deep learning model for better outcomes in recognizing gestures and giving interlinked text and audio to it. This even gives more robust solution.*

A Survey on Indian Sign Language Recognition Techniques – 2015

*Shows all the ISL recognition methods and their limitations.*

Real-Time Sign Language Recognition Using Machine Learning – 2017  *Used Machine learning models to get the real time result for recognizing ISL gestures.*

Indian Sign Language Recognition Using Convolutional Neural Networks – 2020

*Used CNN to identify the hand gestures with high accuracy.*

Real-Time Indian Sign Language Recognition. – 2018

*Implemented grid-based feature extraction for the ISL language.*

Sign Language Recognition Using Kinect -2012

*Used Dept camera-based analysis for recognizing the gestures and used deep model for translating gestures to text and speech.*