VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

A PROJECT REPORT ON

"SIGN LAGUAGE RECOGNITION USING VIDEO SEQUENCES"

Submitted in partial fulfillment for the award of Degree of,

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

By

ADARSH N	**4AL16CS003**
BANISH M G	**4AL16CS020**
ROHAN K RANJOLKAR	**4AL16CS128**
RAHUL J	**4AL16CS130**

Under the Guidance of

Dr. MANJUNATH KOTARI

Professor and Head

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MOODBIDRI-574225, KARNATAKA

2019 – 2020

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI D.K. -574225, KARNATAKA

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the project entitled **"SIGN LANGUAGE RECOGNITION USING VIDEO SEQUENCES"** has been successfully completed by

ADARSH N	**4AL16CS003**
BANISH M G	**4AL16CS020**
ROHAN K RANJOLKAR	**4AL16CS128**
RAHUL J	**4AL16CS130**

the bonafide students of **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2019–2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Dr. Manjunath Kotari
Project Guide

Dr. Manjunath Kotari
Head of the department

Dr. Peter Fernandes
Principal

External Viva

Name of the Examiners

Signature with Date

1. Dr. S. Mohideen Badhusha
2. HEMANTH KUMAR N P

ABSTRACT

Inability to speak is considered to be true disability. People with this disability use different modes to communicate with others, there are number of methods available for their communication one such common method of communication is sign language. Developing sign language application for deaf people can be very important, as they'll be able to communicate easily with even those who don't understand sign language. Our project aims at taking the basic step in bridging the communication gap between normal people, deaf and dumb people using sign language. The main focus of this work is to create a vision-based system to identify sign language gestures from the video sequences. The reason for choosing a system based on vision relates to the fact that it provides a simpler and more intuitive way of communication between a human and a computer. In this report, 46 different gestures have been considered.