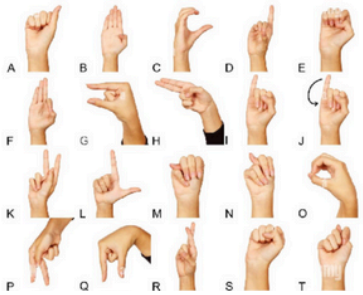
G. H. RAISONI COLLEGE OF ENGG. & MANAGEMENT
Gat No. 1200, Wagholi, Pune – 412 207
(An Autonomous Institute Affiliated to Savitribai Phule Pune University)
Department Of Artificial Intelligence

Sign Language Detection using Deep Learning

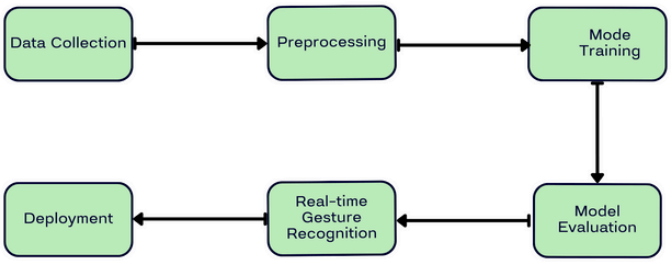
INTRODUCTION

The world hardly lives without communication, no matter whether it is in the form of text, voice or visual expression. The communication among the deaf and dumb people is carried by text and visual expressions. Sign language is a visual means of communication for individuals who are deaf or hard of hearing.
Deep learning offers promising solutions for sign language detection

DATASET

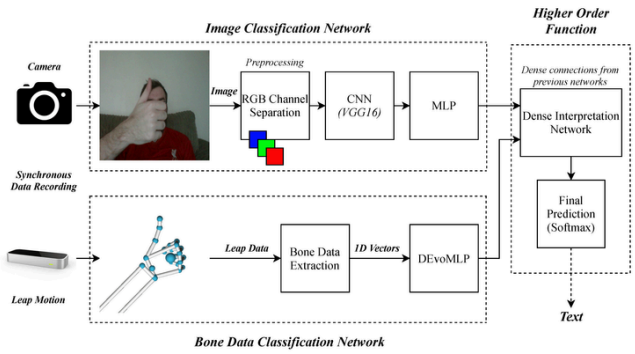


WORKING OF SIGN LANGUAGE DETECTION



- **Dataset collection:** Gather a comprehensive dataset of sign language gestures.
- **Data preprocessing:** Enhance the dataset by adding variations (flips, rotations).
- **Model Training:** Train the model using the preprocessed data.
- **Model Evaluation:** Split the dataset into training and validation sets.
- **Real-time Gesture Recognition:** Use OpenCV to capture real-time video feed.
- **Deployement:** Deploy the model in a real-world application.

Result



Project Guide:

Prof. Sonali Sonavane

Submitted By:

Aditi Kannawar: A04
Pranali Patil: A41
Rani Manawar: A47
Tanay Mapare: A75