

REAL TIME COMMUNICATION SYSTEM **POWERED BY AI FOR SPECIALLY ABLED**

SUBMITTED BY

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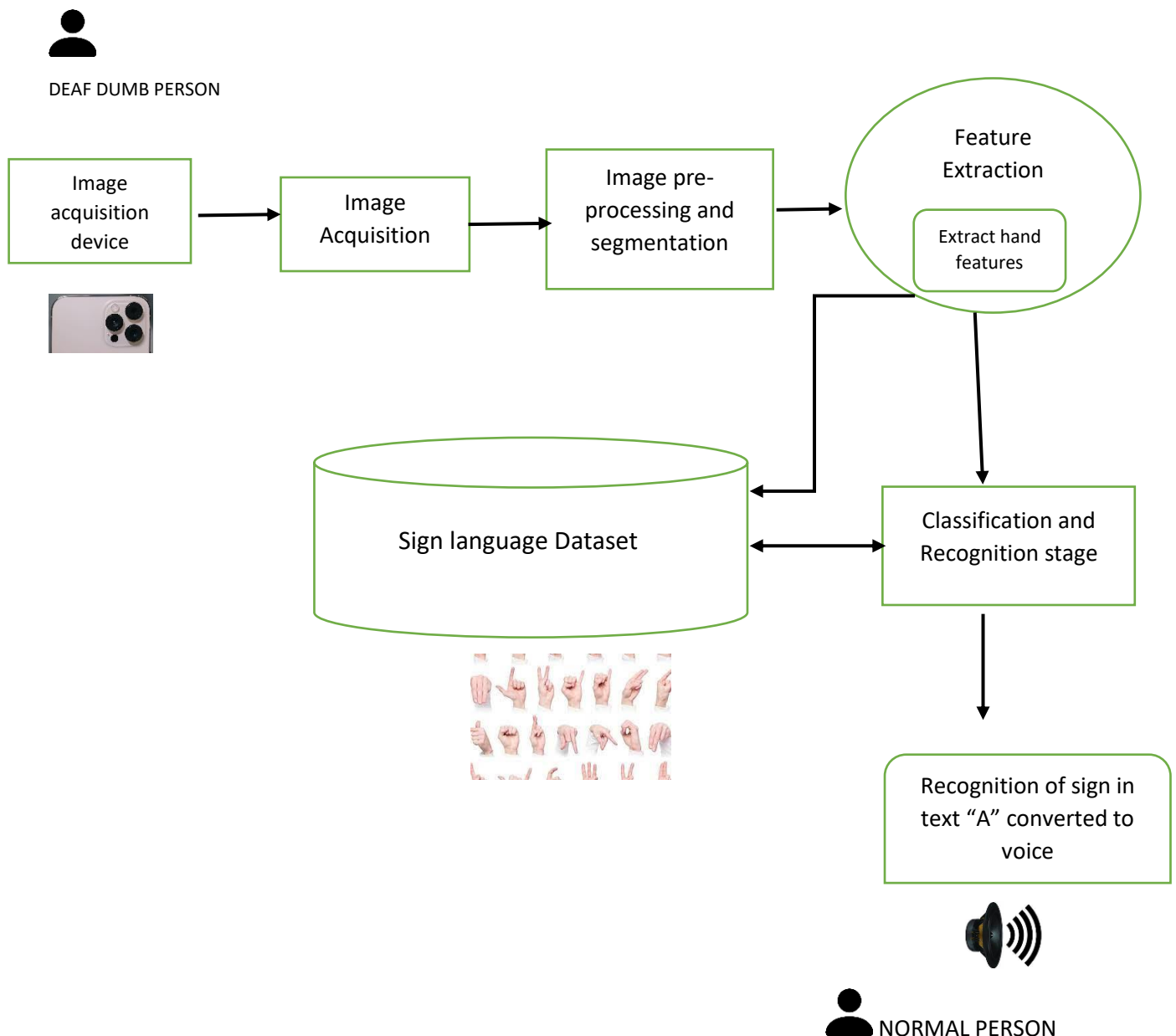
**BACHELOR OF ENGINEERING IN ELECTRONICS AND
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Project Design Phase-I Solution Architecture

Date	01 October 2022
Team ID	PNT2022TMID23501
Project Name	Project – Real time communication powered by AI for specially abled
Maximum Marks	4 Marks

Solution Architecture:

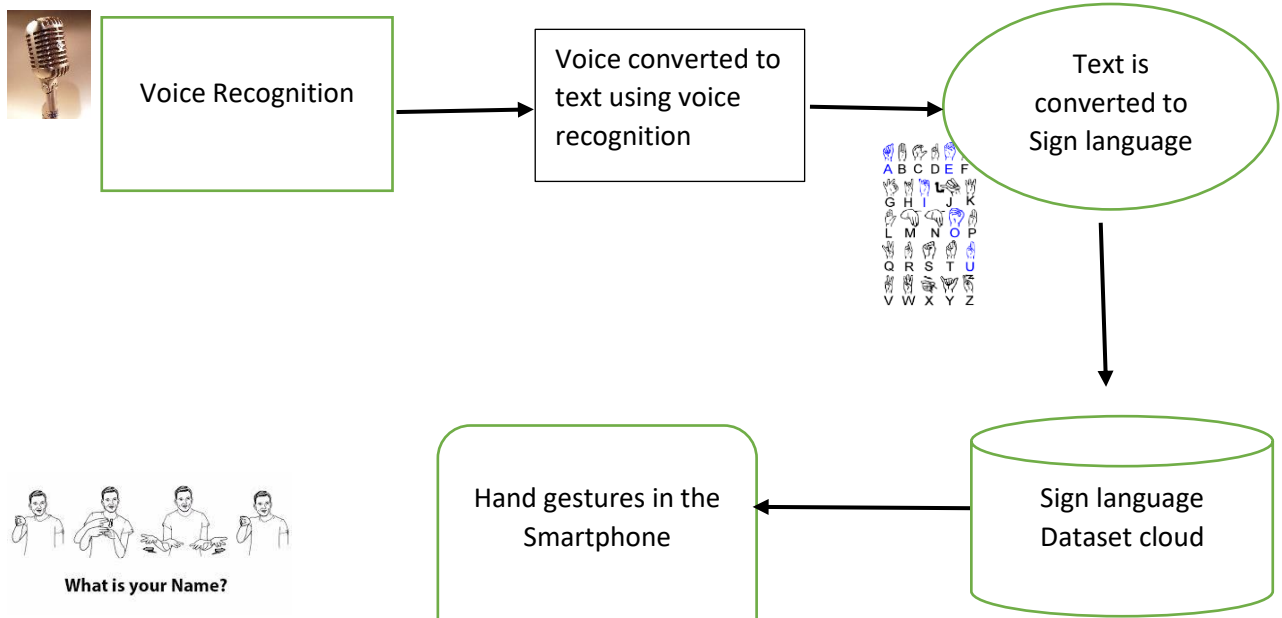
FROM DUMB TO NORMAL PERSON:



- In this architecture we are developing a system that converts the sign language into a human hearing voice in the desired language to convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb.
- Here we are first processing the image through image processing using deep learning technique, then the processed image is segmented and classified based on features and gestures.
- Then the classified feature is used to detect what the dumb person has conveyed by using the dataset in the cloud .
- Then the sign language gesture is converted to text by AI and the output is given through speaker . Here the text is converted to voice .

FROM NORMAL TO DEAF PERSON:

 NORMAL PERSON



 DEAF DUMB PERSON

- In this architecture , the normal person is trying to communicate with the deaf person.
- The voice is recognised from the normal person and then converted to text using google speech to text converted .
- Then the text is converted to sign alphabets using dataset in the IBM Watson cloud .