

## REAL-TIME COMMUNICATION SYSTEM FOR THE SPECIALLY ABLED

### LIST OF PROBLEM STATEMENTS

1. The end user needs an active internet connection so that he can use the translation software without any hassle.
2. The user requires familiarity with the target sign language (ASL/BSL/Australian Sign Language) in order to facilitate communication with his/her partner.
3. The disabled user needs an integrated webcam so that he/she can capture an image of the sign language.
4. The deaf/dumb user requires a way to upload an image from the local file system to obtain the corresponding voice output.
5. The normal user requires a web interface with a text box to enter the input to be translated.
6. The client needs a way to detect the edges in an image so that the image can be analyzed further.
7. The customer needs sufficient knowledge of supervised machine learning techniques so that he can understand how the various signs are grouped.
8. The disabled client requires an image viewing software in order to display the sign language result.

9. The end user needs a text-to-speech (TTS) conversion tool so that the text output can be converted to speech.

10. The normal user needs a speaker device so that the translated output can be played.