

Real-Time Communication System Powered by AI for Specially Abled



① Phases	Obtaining Information	Dataset preparation	Training the Model using the gathered Dataset	Loading Model	Detecting the sign language and transalting the meaning	Predicting the output
② Steps	Sign language alphabets Obtaining information different countries sign language understanding what is name sign	Training Dataset Testing Dataset Image Processing and Classification	Find the best Model optimize Creating CNN Adding layers, Optimizer, metrics	Loading the model in CNN Image processing Gathering image from user	Predicting the related meaning Using trained CNN Model Give output as text	Displaying the predicted output Text Format Feedback of user
③ Feelings	👍 The transaltion should be 100% accurate Quality of service Information on parameters of Sign language	The quality of the service should be good	Enough datasets might provided for better model	If the background is great then translations will be accurate	Should be able to detect all versions of sign language	Accurate translation = Happy customer
	👎 There shouldnt be any mistransltions		The hand gestures are not detected properly	There shouldnt be any user navigation problem	If this phase doesnt work it might spoil the end result	
④ Pain points	Restirictions in finding the right Information	Incorrect datasets	More amount of Dataset requires more training period	Needs internet connectivity for operation	Need an effiecient training model	Risk of accuracy loss due to unaccurate images
⑤ Opportunities	Good Image datasets for best accuracy	Proper Classification of Dataset		No unwanted Dataset/ Images		Great Accuracy on Predicted Output