

Project Development Phase
Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID22164
Project Name	Project – Real Time Communication Powered by AI for Specially Abled
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Model Summary	The project aims to develop 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. We are making use of a convolution neural network to create a model that is trained on different hand gestures. An app is built which uses this model. This app enables deaf and dumb people to convey their information	 

		using signs which get converted to human-understandable language and speech is given as output.	
2.	Accuracy	Training Accuracy –0.9981 Validation Accuracy –0.9749	<div>Epoch 1/10</div> <div>158/158 [=====] - 59s 370ms/step - loss: 0.3116 - accuracy: 0.9102 - val_loss: 0.2510 - val_accuracy: 0.9618 - lr: 0.0010</div> <div>Epoch 2/10</div> <div>158/158 [=====] - 58s 368ms/step - loss: 0.0292 - accuracy: 0.9922 - val_loss: 0.2516 - val_accuracy: 0.9733 - lr: 0.0010</div> <div>Epoch 3/10</div> <div>158/158 [=====] - 58s 369ms/step - loss: 0.0131 - accuracy: 0.9970 - val_loss: 0.2420 - val_accuracy: 0.9702 - lr: 0.0010</div> <div>Epoch 4/10</div> <div>158/158 [=====] - 58s 369ms/step - loss: 0.0073 - accuracy: 0.9983 - val_loss: 0.3255 - val_accuracy: 0.9756 - lr: 0.0010</div> <div>Epoch 5/10</div> <div>158/158 [=====] - 58s 368ms/step - loss: 0.0054 - accuracy: 0.9990 - val_loss: 0.3248 - val_accuracy: 0.9747 - lr: 0.0010</div> <div>Epoch 6/10</div> <div>158/158 [=====] - 59s 370ms/step - loss: 0.0057 - accuracy: 0.9986 - val_loss: 0.3556 - val_accuracy: 0.9764 - lr: 0.0010</div> <div>Epoch 7/10</div> <div>158/158 [=====] - 58s 368ms/step - loss: 0.0053 - accuracy: 0.9981 - val_loss: 0.2799 - val_accuracy: 0.9773 - lr: 0.0010</div> <div>Epoch 8/10</div> <div>158/158 [=====] - 58s 369ms/step - loss: 0.0028 - accuracy: 0.9992 - val_loss: 0.2487 - val_accuracy: 0.9778 - lr: 0.0010</div> <div>Epoch 9/10</div> <div>158/158 [=====] - 57s 363ms/step - loss: 0.0042 - accuracy: 0.9987 - val_loss: 0.3611 - val_accuracy: 0.9756 - lr: 0.0010</div> <div>Epoch 10/10</div> <div>158/158 [=====] - 58s 369ms/step - loss: 0.0042 - accuracy: 0.9988 - val_loss: 0.4400 - val_accuracy: 0.9733 - lr: 0.0010</div> <div><keras.callbacks.History at 0x7f207f15bb50></div>