
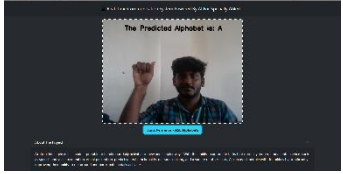



Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID22143
Project Name	REAL-TIME COMMUNICATION SYSTEM 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 -0.9747	<pre> Epoch 1/10 6500/6500 [=====] - 135s 287ms/step - loss: 8.2180 - accuracy: 0.9783 - val_loss: 0.1424 - val_accuracy: 0.9797 - lr: 0.00010 Epoch 2/10 6500/6500 [=====] - 135s 287ms/step - loss: 8.4948 - accuracy: 0.9529 - val_loss: 0.1745 - val_accuracy: 0.9746 - lr: 0.00010 Epoch 3/10 6500/6500 [=====] - 135s 288ms/step - loss: 8.4910 - accuracy: 0.9547 - val_loss: 0.1514 - val_accuracy: 0.9667 - lr: 0.00010 Epoch 4/10 6500/6500 [=====] - 135s 294ms/step - loss: 8.4910 - accuracy: 0.9561 - val_loss: 0.1677 - val_accuracy: 0.9706 - lr: 0.00010 Epoch 5/10 6500/6500 [=====] - 135s 298ms/step - loss: 8.4910 - accuracy: 0.9570 - val_loss: 0.1688 - val_accuracy: 0.9716 - lr: 0.00010 Epoch 6/10 6500/6500 [=====] - 136s 298ms/step - loss: 8.4909 - accuracy: 0.9573 - val_loss: 0.1694 - val_accuracy: 0.9611 - lr: 0.00010 Epoch 7/10 6500/6500 [=====] - 136s 288ms/step - loss: 8.4940 - accuracy: 0.9586 - val_loss: 0.1600 - val_accuracy: 0.9644 - lr: 0.00010 Epoch 8/10 6500/6500 [=====] - 137s 287ms/step - loss: 8.4970 - accuracy: 0.9578 - val_loss: 0.1497 - val_accuracy: 0.9702 - lr: 0.00010 Epoch 9/10 6500/6500 [=====] - 137s 287ms/step - loss: 8.4920 - accuracy: 0.9580 - val_loss: 0.1474 - val_accuracy: 0.9759 - lr: 0.00010 Epoch 10/10 6500/6500 [=====] - 135s 291ms/step - loss: 8.4911 - accuracy: 0.9581 - val_loss: 0.1464 - val_accuracy: 0.9767 - lr: 0.00010 </pre>