

Project Development Phase Model Performance Test

Date	12 November 2022
Team ID	PNT2022TMID01529
Project Name	A GESTURE BASED TOOL FOR STERILE BROWSING OF RADIOLOGY IMAGES
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot
1.	Model Summary	-	<pre> Model: "sequential" Layer (type) Output Shape Param # ----- batch_normalization (BatchN (None, 128, 128, 1) 4 ormalization) conv2d (Conv2D) (None, 126, 126, 32) 320 max_pooling2d (MaxPooling2D (None, 63, 63, 32) 0) conv2d_1 (Conv2D) (None, 63, 63, 6) 3078 max_pooling2d_1 (MaxPooling (None, 31, 31, 6) 0 2D) conv2d_2 (Conv2D) (None, 31, 31, 128) 7040 max_pooling2d_2 (MaxPooling (None, 15, 15, 128) 0 2D) conv2d_3 (Conv2D) (None, 15, 15, 128) 65664 max_pooling2d_3 (MaxPooling (None, 7, 7, 128) 0 2D) flatten (Flatten) (None, 6272) 0 dense (Dense) (None, 128) 802944 dense_1 (Dense) (None, 64) 8256 dense_2 (Dense) (None, 32) 2080 dense_3 (Dense) (None, 6) 198 ===== Total params: 889,584 Trainable params: 889,582 Non-trainable params: 2 </pre>

2.	Accuracy	<p>Training Accuracy – 99.92%</p> <p>Validation Accuracy – 99.86%</p>	<p>Epoch 1/20 562/562 [=====] - 308s 546ms/step - loss: 0.2178 - accuracy: 0.9182 - val_loss: 0.0014 - val_accuracy: 1.0000</p> <p>Epoch 2/20 562/562 [=====] - 306s 545ms/step - loss: 0.0386 - accuracy: 0.9880 - val_loss: 0.0068 - val_accuracy: 0.9978</p> <p>Epoch 3/20 562/562 [=====] - 299s 532ms/step - loss: 0.0192 - accuracy: 0.9948 - val_loss: 7.7184e-04 - val_accuracy: 1.0000</p> <p>Epoch 4/20 562/562 [=====] - 306s 545ms/step - loss: 0.0137 - accuracy: 0.9960 - val_loss: 0.0032 - val_accuracy: 0.9983</p> <p>Epoch 5/20 562/562 [=====] - 310s 552ms/step - loss: 0.0184 - accuracy: 0.9940 - val_loss: 5.2546e-04 - val_accuracy: 1.0000</p> <p>Epoch 6/20 562/562 [=====] - 312s 556ms/step - loss: 0.0150 - accuracy: 0.9949 - val_loss: 1.4421e-05 - val_accuracy: 1.0000</p> <p>Epoch 7/20 562/562 [=====] - 304s 541ms/step - loss: 0.0073 - accuracy: 0.9978 - val_loss: 0.0120 - val_accuracy: 0.9967</p> <p>Epoch 8/20 562/562 [=====] - 309s 550ms/step - loss: 0.0111 - accuracy: 0.9966 - val_loss: 0.0011 - val_accuracy: 0.9994</p> <p>Epoch 9/20 562/562 [=====] - 313s 556ms/step - loss: 0.0067 - accuracy: 0.9982 - val_loss: 2.7600e-05 - val_accuracy: 1.0000</p> <p>Epoch 10/20 562/562 [=====] - 311s 553ms/step - loss: 0.0124 - accuracy: 0.9962 - val_loss: 4.3617e-04 - val_accuracy: 1.0000</p> <p>Epoch 11/20 562/562 [=====] - 311s 552ms/step - loss: 0.0071 - accuracy: 0.9978 - val_loss: 2.4401e-04 - val_accuracy: 1.0000</p> <p>Epoch 12/20 562/562 [=====] - 310s 552ms/step - loss: 0.0035 - accuracy: 0.9992 - val_loss: 0.0021 - val_accuracy: 0.9989</p> <p>Epoch 13/20 562/562 [=====] - 303s 539ms/step - loss: 0.0090 - accuracy: 0.9975 - val_loss: 0.0017 - val_accuracy: 1.0000</p> <p>Epoch 14/20 562/562 [=====] - 299s 533ms/step - loss: 0.0082 - accuracy: 0.9976 - val_loss: 1.9254e-05 - val_accuracy: 1.0000</p> <p>Epoch 15/20 562/562 [=====] - 308s 549ms/step - loss: 0.0072 - accuracy: 0.9982 - val_loss: 1.5410e-04 - val_accuracy: 1.0000</p> <p>Epoch 16/20 562/562 [=====] - 307s 545ms/step - loss: 0.0078 - accuracy: 0.9974 - val_loss: 1.8354e-04 - val_accuracy: 1.0000</p> <p>Epoch 17/20 562/562 [=====] - 306s 545ms/step - loss: 0.0020 - accuracy: 0.9996 - val_loss: 1.1681e-05 - val_accuracy: 1.0000</p> <p>Epoch 18/20 562/562 [=====] - 307s 546ms/step - loss: 0.0074 - accuracy: 0.9981 - val_loss: 1.8610e-04 - val_accuracy: 1.0000</p> <p>Epoch 19/20 562/562 [=====] - 300s 534ms/step - loss: 0.0051 - accuracy: 0.9986 - val_loss: 1.1064e-04 - val_accuracy: 1.0000</p> <p>Epoch 20/20 562/562 [=====] - 304s 540ms/step - loss: 0.0026 - accuracy: 0.9992 - val_loss: 0.0037 - val_accuracy: 0.9986</p>
----	----------	---	--