

Project Development Phase
Model Performance Test

Date	7 Nov 2023
Team ID	591762
Project Name	CrimeVision: Advanced Crime Classification with Deep Learning

Model Performance Testing:

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

Parameter	Values	Screenshot																		
Model Summary	<div>Total params: 7,170,510</div> <div>Trainable params: 5,586,254</div> <div>Non-trainable params: 1,584,256</div>	<div>29084464/29084464 [=====] - 0s 0us/step</div> <div>Model: "sequential"</div> <table><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr><tr><td>densenet121 (Functional)</td><td>(None, 2, 2, 1024)</td><td>7037504</td></tr><tr><td>global_average_pooling2d (GlobalAveragePooling2D)</td><td>(None, 1024)</td><td>0</td></tr><tr><td>dense (Dense)</td><td>(None, 128)</td><td>131200</td></tr><tr><td>dropout (Dropout)</td><td>(None, 128)</td><td>0</td></tr><tr><td>classification (Dense)</td><td>(None, 14)</td><td>1806</td></tr></table> <div>Total params: 7170510 (27.35 MB) Trainable params: 5586254 (21.31 MB) Non-trainable params: 1584256 (6.04 MB)</div>	Layer (type)	Output Shape	Param #	densenet121 (Functional)	(None, 2, 2, 1024)	7037504	global_average_pooling2d (GlobalAveragePooling2D)	(None, 1024)	0	dense (Dense)	(None, 128)	131200	dropout (Dropout)	(None, 128)	0	classification (Dense)	(None, 14)	1806
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classification (Dense)	(None, 14)	1806																		

Accuracy	<p>Epoch 1:</p> <p>Training accuracy: 0.9991</p> <p>Validation accuracy: 0.9998</p> <p>Epoch 2:</p> <p>Training accuracy: 0.9997</p> <p>Validation accuracy: 0.9998</p> <p>Epoch 3:</p> <p>Training accuracy: 0.9998</p> <p>Validation accuracy: 0.9999</p> <p>Epoch 4:</p> <p>Training accuracy: 0.9999</p> <p>Validation accuracy: 0.9999</p> <p>Epoch 5:</p> <p>Training accuracy: 0.9999</p> <p>Validation accuracy: 0.9999</p>	<pre>Epoch 1/5 7915/7915 [=====] - 1698s 205ms/step - loss: 0.0610 - auc: 0.9991 - val_loss: 0.0180 - val_auc: 0.9998 Epoch 2/5 7915/7915 [=====] - 1535s 194ms/step - loss: 0.0179 - auc: 0.9997 - val_loss: 0.0114 - val_auc: 0.9998 Epoch 3/5 7915/7915 [=====] - 1547s 195ms/step - loss: 0.0121 - auc: 0.9998 - val_loss: 0.0079 - val_auc: 0.9999 Epoch 4/5 7915/7915 [=====] - 1497s 189ms/step - loss: 0.0097 - auc: 0.9999 - val_loss: 0.0071 - val_auc: 0.9999 Epoch 5/5 7915/7915 [=====] - 1457s 184ms/step - loss: 0.0084 - auc: 0.9999 - val_loss: 0.0077 - val_auc: 0.9999</pre>
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