

Project Development Phase Model Performance Test

Date	19 November 2022
Team ID	PNT2022TMID12327
Project Name	Emerging methods for early detection of forest fires
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	-Total params : 32,515,457 Trainable params : 32,515,457 Non-trainable params : 0	<div><p>Model: "sequential_5"</p><table><thead><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr></thead><tbody><tr><td>conv2d_4 (Conv2D)</td><td>(None, 126, 126, 32)</td><td>896</td></tr><tr><td>max_pooling2d_4 (MaxPooling 2D)</td><td>(None, 63, 63, 32)</td><td>0</td></tr><tr><td>flatten_4 (Flatten)</td><td>(None, 127008)</td><td>0</td></tr><tr><td>dense (Dense)</td><td>(None, 256)</td><td>32514304</td></tr><tr><td>dense_1 (Dense)</td><td>(None, 1)</td><td>257</td></tr></tbody></table><p>Total params: 32,515,457 Trainable params: 32,515,457 Non-trainable params: 0</p></div>	Layer (type)	Output Shape	Param #	conv2d_4 (Conv2D)	(None, 126, 126, 32)	896	max_pooling2d_4 (MaxPooling 2D)	(None, 63, 63, 32)	0	flatten_4 (Flatten)	(None, 127008)	0	dense (Dense)	(None, 256)	32514304	dense_1 (Dense)	(None, 1)	257																														
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2.	Accuracy	Training Accuracy - 94.50% Validation Accuracy - 98.35%	<div><p>Training and Validation Accuracy</p><table border="1"><caption>Training and Validation Accuracy Data (Estimated)</caption><thead><tr><th>Epoch</th><th>Training Accuracy</th><th>Validation Accuracy</th></tr></thead><tbody><tr><td>0</td><td>0.65</td><td>0.78</td></tr><tr><td>1</td><td>0.88</td><td>0.94</td></tr><tr><td>2</td><td>0.90</td><td>0.94</td></tr><tr><td>3</td><td>0.92</td><td>0.94</td></tr><tr><td>4</td><td>0.90</td><td>0.97</td></tr><tr><td>5</td><td>0.90</td><td>0.97</td></tr><tr><td>6</td><td>0.91</td><td>0.97</td></tr><tr><td>7</td><td>0.93</td><td>0.97</td></tr><tr><td>8</td><td>0.93</td><td>0.96</td></tr><tr><td>9</td><td>0.91</td><td>0.98</td></tr><tr><td>10</td><td>0.90</td><td>0.96</td></tr><tr><td>11</td><td>0.92</td><td>0.98</td></tr><tr><td>12</td><td>0.93</td><td>0.99</td></tr><tr><td>13</td><td>0.94</td><td>0.98</td></tr><tr><td>14</td><td>0.95</td><td>0.98</td></tr></tbody></table></div>	Epoch	Training Accuracy	Validation Accuracy	0	0.65	0.78	1	0.88	0.94	2	0.90	0.94	3	0.92	0.94	4	0.90	0.97	5	0.90	0.97	6	0.91	0.97	7	0.93	0.97	8	0.93	0.96	9	0.91	0.98	10	0.90	0.96	11	0.92	0.98	12	0.93	0.99	13	0.94	0.98	14	0.95	0.98
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