

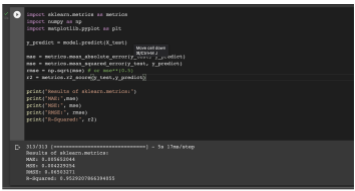
Project Development Phase

Model Performance Test

DATE	10 November 2022
TEAM ID	PNT2022TMID06256
PROJECT NAME	Project-A Novel Method For Handwritten Digit Recognition System
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.	Metrics	Regression Model: MAE - 0.005652044, MSE - 0.004229254, RMSE - 0.06503271, R2 score- 0.9529207866394055	

		<div>Classification Model: Confusion Matrix Accuracy Score- 0.9727 & Classification Report</div>	<div><pre>y_predict = (y_predict>0.5) print('classification report') print(metrics.classification_report(y_test, y_predict)) print('accuracy score:') print(metrics.accuracy_score(y_test, y_predict)) #print(metrics.confusion_matrix(y_test, y_predict))</pre><div><div>classification report</div><table><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr><tr><td>0</td><td>0.98</td><td>0.98</td><td>0.98</td><td>980</td></tr><tr><td>1</td><td>0.98</td><td>0.98</td><td>0.98</td><td>1135</td></tr><tr><td>2</td><td>0.96</td><td>0.97</td><td>0.97</td><td>1032</td></tr><tr><td>3</td><td>0.97</td><td>0.98</td><td>0.98</td><td>1010</td></tr><tr><td>4</td><td>0.98</td><td>0.97</td><td>0.98</td><td>982</td></tr><tr><td>5</td><td>0.97</td><td>0.98</td><td>0.97</td><td>892</td></tr><tr><td>6</td><td>0.98</td><td>0.98</td><td>0.98</td><td>958</td></tr><tr><td>7</td><td>0.98</td><td>0.97</td><td>0.97</td><td>1028</td></tr><tr><td>8</td><td>0.98</td><td>0.94</td><td>0.96</td><td>974</td></tr><tr><td>9</td><td>0.97</td><td>0.96</td><td>0.96</td><td>1009</td></tr><tr><td>micro avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>10000</td></tr><tr><td>macro avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>10000</td></tr><tr><td>weighted avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>10000</td></tr><tr><td>samples avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>10000</td></tr></table><div>accuracy score: 0.9727</div></div></div>		precision	recall	f1-score	support	0	0.98	0.98	0.98	980	1	0.98	0.98	0.98	1135	2	0.96	0.97	0.97	1032	3	0.97	0.98	0.98	1010	4	0.98	0.97	0.98	982	5	0.97	0.98	0.97	892	6	0.98	0.98	0.98	958	7	0.98	0.97	0.97	1028	8	0.98	0.94	0.96	974	9	0.97	0.96	0.96	1009	micro avg	0.97	0.97	0.97	10000	macro avg	0.97	0.97	0.97	10000	weighted avg	0.97	0.97	0.97	10000	samples avg	0.97	0.97	0.97	10000
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