

A Novel Method for Handwritten Digit Recognition System

Test The Model

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+ Code + Text

TEST THE MODEL

prediction = model.predict(X_test[:4])
print(prediction)

1/1 [=====] - 0s 162ms/step
[[[4.82307793e-33 0.00000000e+00 9.65934645e-36 2.09515458e-31
 0.00000000e+00 0.00000000e+00 0.00000000e+00 1.00000000e+00
 1.41525012e-28 2.02743801e-28 1.46349561e-32 1.11425132e-34
 6.44423165e-31 4.17907435e-34 2.36121091e-34 6.97943664e-34
 1.22985615e-31 1.92834908e-33 5.76734263e-32 4.31069868e-33]
 [0.00000000e+00 1.48158955e-31 1.00000000e+00 0.00000000e+00
 0.00000000e+00 0.00000000e+00 1.51186440e-26 0.00000000e+00
 3.68928299e-36 0.00000000e+00 0.00000000e+00 1.71930381e-38
 0.00000000e+00 5.17694135e-38 0.00000000e+00 0.00000000e+00
 0.00000000e+00 1.32154463e-37 0.00000000e+00 0.00000000e+00]
 [3.03721437e-19 1.00000000e+00 4.59642561e-17 1.24504243e-30
 1.35350973e-13 1.89943610e-20 1.74381770e-21 8.84479003e-15
 1.14718665e-10 4.03921462e-21 1.12119854e-24 2.64095889e-22
 2.66294040e-23 3.51082672e-23 3.46701687e-21 4.11649340e-21
 3.29003819e-22 2.61595238e-22 2.14018267e-22 3.07413859e-21]
 [1.00000000e+00 0.00000000e+00 5.43074803e-24 3.86946352e-36
 3.54033067e-32 0.00000000e+00 7.11746669e-21 2.45945727e-37
 4.37323057e-30 1.36392252e-28 1.91405350e-30 2.91958237e-32
 4.03463562e-31 4.02791368e-32 2.78360523e-29 2.96944034e-33
 3.18392233e-33 1.74941125e-32 1.08032249e-29 3.59886669e-33]]

print(np.argmax(prediction,axis = 1))
print(y_test[:4])

[7 2 1 0]
[[0. 0. 0. 0. 0. 0. 0. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
 [0. 0. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
 [0. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
 [1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]]
```