

## Train The Model

```
model.fit(x_train,y_train,validation_data=(x_test,ytest),epochs=50,batch_size=64,verbose=1)
```

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Epoch 1/50
84/84 [.....] - 10s 40ms/step - loss: 0.0018 - val_loss: 7.8491e-04
Epoch 2/50
84/84 [.....] - 2s 23ms/step - loss: 1.3458e-04 - val_loss: 8.1888e-04
Epoch 3/50
84/84 [.....] - 2s 26ms/step - loss: 1.1971e-04 - val_loss: 7.3377e-04
Epoch 4/50
84/84 [.....] - 2s 22ms/step - loss: 1.2129e-04 - val_loss: 8.7759e-04
Epoch 5/50
84/84 [.....] - 2s 24ms/step - loss: 1.1870e-04 - val_loss: 8.4510e-04
Epoch 6/50
84/84 [.....] - 2s 26ms/step - loss: 1.2583e-04 - val_loss: 8.8010
Epoch 7/50
84/84 [.....] - 2s 24ms/step - loss: 1.2809e-04 - val_loss: 8.8011
Epoch 8/50
84/84 [.....] - 2s 21ms/step - loss: 1.1149e-04 - val_loss: 8.1888e-04
Epoch 9/50
84/84 [.....] - 2s 19ms/step - loss: 1.1051e-04 - val_loss: 7.3824e-04
Epoch 10/50
84/84 [.....] - 2s 19ms/step - loss: 1.0038e-04 - val_loss: 8.5573e-04
Epoch 11/50
84/84 [.....] - 2s 17ms/step - loss: 1.2032e-04 - val_loss: 8.8010
Epoch 12/50
84/84 [.....] - 2s 18ms/step - loss: 1.1079e-04 - val_loss: 8.1311e-04
Epoch 13/50
84/84 [.....] - 2s 16ms/step - loss: 1.0000e-04 - val_loss: 8.4788e-04
Epoch 14/50
84/84 [.....] - 2s 20ms/step - loss: 8.5711e-05 - val_loss: 8.4183e-04
Epoch 15/50
84/84 [.....] - 2s 20ms/step - loss: 8.1587e-05 - val_loss: 8.4513e-04
Epoch 16/50

Epoch 17/50
84/84 [.....] - 2s 28ms/step - loss: 8.1805e-05 - val_loss: 7.8263e-04
Epoch 18/50
84/84 [.....] - 2s 21ms/step - loss: 8.8793e-05 - val_loss: 8.3865e-04
Epoch 19/50
84/84 [.....] - 2s 23ms/step - loss: 8.8948e-05 - val_loss: 8.0963e-04
Epoch 20/50
84/84 [.....] - 2s 22ms/step - loss: 8.2429e-05 - val_loss: 8.1348e-04
Epoch 21/50
84/84 [.....] - 2s 21ms/step - loss: 9.1391e-05 - val_loss: 8.8818
Epoch 22/50
84/84 [.....] - 2s 21ms/step - loss: 7.6975e-05 - val_loss: 8.2513e-04
Epoch 23/50
84/84 [.....] - 2s 21ms/step - loss: 8.9810e-05 - val_loss: 7.6774e-04
Epoch 24/50
84/84 [.....] - 2s 23ms/step - loss: 7.7254e-05 - val_loss: 9.2345e-04
Epoch 25/50
84/84 [.....] - 2s 21ms/step - loss: 7.8847e-05 - val_loss: 8.3868e-04
Epoch 26/50
84/84 [.....] - 2s 24ms/step - loss: 6.2571e-05 - val_loss: 8.3348e-04
Epoch 27/50
84/84 [.....] - 2s 28ms/step - loss: 6.2461e-05 - val_loss: 8.9884e-04
Epoch 28/50
84/84 [.....] - 2s 14ms/step - loss: 8.3408e-05 - val_loss: 8.0581e-04
Epoch 29/50
84/84 [.....] - 2s 23ms/step - loss: 6.2840e-05 - val_loss: 7.6875e-04
Epoch 30/50
84/84 [.....] - 2s 23ms/step - loss: 5.8258e-05 - val_loss: 8.6798e-04
Epoch 31/50
84/84 [.....] - 2s 22ms/step - loss: 5.2839e-05 - val_loss: 8.2303e-04
Epoch 32/50
84/84 [.....] - 2s 22ms/step - loss: 5.5354e-05 - val_loss: 8.4147e-04
Epoch 33/50
84/84 [.....] - 2s 16ms/step - loss: 5.8588e-05 - val_loss: 8.5649e-04
Epoch 34/50
84/84 [.....] - 2s 24ms/step - loss: 4.8728e-05 - val_loss: 8.1847e-04
Epoch 35/50
84/84 [.....] - 2s 23ms/step - loss: 4.6476e-05 - val_loss: 8.8689e-04
Epoch 36/50
84/84 [.....] - 2s 21ms/step - loss: 4.8893e-05 - val_loss: 8.8287e-04
Epoch 37/50

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Epoch 38/50
84/84 [.....] - 2s 10ms/step - loss: 4.2573e-05 - val_loss: 2.8283e-04
Epoch 39/50
84/84 [.....] - 2s 10ms/step - loss: 4.4277e-05 - val_loss: 2.8289e-04
Epoch 40/50
84/84 [.....] - 2s 10ms/step - loss: 4.1741e-05 - val_loss: 2.8171e-04
Epoch 41/50
84/84 [.....] - 2s 21ms/step - loss: 4.2183e-05 - val_loss: 1.8483e-04
Epoch 42/50
84/84 [.....] - 2s 21ms/step - loss: 1.6738e-05 - val_loss: 2.1604e-04
Epoch 43/50
84/84 [.....] - 2s 16ms/step - loss: 3.5417e-05 - val_loss: 1.9743e-04
Epoch 44/50
84/84 [.....] - 2s 28ms/step - loss: 1.7556e-05 - val_loss: 1.8178e-04
Epoch 45/50
84/84 [.....] - 2s 12ms/step - loss: 3.7558e-05 - val_loss: 1.8212e-04
Epoch 46/50
84/84 [.....] - 2s 21ms/step - loss: 2.6515e-05 - val_loss: 7.8841e-04
Epoch 47/50
84/84 [.....] - 2s 21ms/step - loss: 3.5327e-05 - val_loss: 4.7348e-04
Epoch 48/50
84/84 [.....] - 2s 20ms/step - loss: 3.4212e-05 - val_loss: 2.9112e-04
Epoch 49/50
84/84 [.....] - 2s 10ms/step - loss: 3.4850e-05 - val_loss: 2.2660e-04
Epoch 50/50
84/84 [.....] - 2s 21ms/step - loss: 3.2850e-05 - val_loss: 1.8159e-04

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