Train on 13678 samples, validate on 1520 samples

Epoch 1/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.4202 - accuracy: 0.8106 - val\_loss: 0.2958 - val\_accuracy: 0.8914

Epoch 2/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.2715 - accuracy: 0.8889 - val\_loss: 0.3297 - val\_accuracy: 0.8579

Epoch 3/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.2184 - accuracy: 0.9131 - val\_loss: 0.2123 - val\_accuracy: 0.9204

Epoch 4/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.1886 - accuracy: 0.9277 - val\_loss: 0.1923 - val\_accuracy: 0.9283

Epoch 5/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.1621 - accuracy: 0.9402 - val\_loss: 0.1858 - val\_accuracy: 0.9303

Epoch 6/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.1419 - accuracy: 0.9452 - val\_loss: 0.1779 - val\_accuracy: 0.9349

Epoch 7/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.1247 - accuracy: 0.9520 - val\_loss: 0.2139 - val\_accuracy: 0.9224

Epoch 8/50

13678/13678 [==============================] - 43s 3ms/sample - loss: 0.1111 - accuracy: 0.9595 - val\_loss: 0.1782 - val\_accuracy: 0.9322

Epoch 9/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0967 - accuracy: 0.9651 - val\_loss: 0.1805 - val\_accuracy: 0.9368

Epoch 10/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0815 - accuracy: 0.9708 - val\_loss: 0.1621 - val\_accuracy: 0.9461

Epoch 11/50

13678/13678 [==============================] - 43s 3ms/sample - loss: 0.0719 - accuracy: 0.9744 - val\_loss: 0.1746 - val\_accuracy: 0.9395

Epoch 12/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0601 - accuracy: 0.9789 - val\_loss: 0.1989 - val\_accuracy: 0.9401

Epoch 13/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0510 - accuracy: 0.9830 - val\_loss: 0.2144 - val\_accuracy: 0.9355

Epoch 14/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0412 - accuracy: 0.9865 - val\_loss: 0.2147 - val\_accuracy: 0.9342

Epoch 15/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.0380 - accuracy: 0.9869 - val\_loss: 0.2150 - val\_accuracy: 0.9375

Epoch 16/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0336 - accuracy: 0.9885 - val\_loss: 0.2243 - val\_accuracy: 0.9382

Epoch 17/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0280 - accuracy: 0.9906 - val\_loss: 0.2913 - val\_accuracy: 0.9375

Epoch 18/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0215 - accuracy: 0.9932 - val\_loss: 0.2405 - val\_accuracy: 0.9401

Epoch 19/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0221 - accuracy: 0.9921 - val\_loss: 0.2307 - val\_accuracy: 0.9414

Epoch 20/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0137 - accuracy: 0.9955 - val\_loss: 0.3204 - val\_accuracy: 0.9375

Epoch 21/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0173 - accuracy: 0.9946 - val\_loss: 0.3117 - val\_accuracy: 0.9395

Epoch 22/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0071 - accuracy: 0.9985 - val\_loss: 0.3510 - val\_accuracy: 0.9414

Epoch 23/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0037 - accuracy: 0.9993 - val\_loss: 0.3769 - val\_accuracy: 0.9349

Epoch 24/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0367 - accuracy: 0.9884 - val\_loss: 0.3434 - val\_accuracy: 0.9349

Epoch 25/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.0077 - accuracy: 0.9982 - val\_loss: 0.3929 - val\_accuracy: 0.9362

Epoch 26/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0076 - accuracy: 0.9976 - val\_loss: 0.4038 - val\_accuracy: 0.9388

Epoch 27/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0167 - accuracy: 0.9950 - val\_loss: 0.3450 - val\_accuracy: 0.9368

Epoch 28/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0068 - accuracy: 0.9981 - val\_loss: 0.3595 - val\_accuracy: 0.9421

Epoch 29/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 9.8079e-04 - accuracy: 0.9999 - val\_loss: 0.4024 - val\_accuracy: 0.9441

Epoch 30/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 3.1904e-04 - accuracy: 1.0000 - val\_loss: 0.4257 - val\_accuracy: 0.9434

Epoch 31/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 2.0604e-04 - accuracy: 1.0000 - val\_loss: 0.4460 - val\_accuracy: 0.9414

Epoch 32/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 1.5541e-04 - accuracy: 1.0000 - val\_loss: 0.4532 - val\_accuracy: 0.9434

Epoch 33/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 1.2047e-04 - accuracy: 1.0000 - val\_loss: 0.4724 - val\_accuracy: 0.9395

Epoch 34/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 9.8391e-05 - accuracy: 1.0000 - val\_loss: 0.4675 - val\_accuracy: 0.9434

Epoch 35/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 7.7513e-05 - accuracy: 1.0000 - val\_loss: 0.4782 - val\_accuracy: 0.9421

Epoch 36/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 6.1689e-05 - accuracy: 1.0000 - val\_loss: 0.4962 - val\_accuracy: 0.9408

Epoch 37/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 5.0034e-05 - accuracy: 1.0000 - val\_loss: 0.5030 - val\_accuracy: 0.9414

Epoch 38/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 4.0779e-05 - accuracy: 1.0000 - val\_loss: 0.5171 - val\_accuracy: 0.9395

Epoch 39/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 3.2947e-05 - accuracy: 1.0000 - val\_loss: 0.5303 - val\_accuracy: 0.9414

Epoch 40/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 2.4890e-05 - accuracy: 1.0000 - val\_loss: 0.5405 - val\_accuracy: 0.9414

Epoch 41/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 2.0727e-05 - accuracy: 1.0000 - val\_loss: 0.5559 - val\_accuracy: 0.9414

Epoch 42/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 1.6626e-05 - accuracy: 1.0000 - val\_loss: 0.5716 - val\_accuracy: 0.9421

Epoch 43/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 1.2603e-05 - accuracy: 1.0000 - val\_loss: 0.5715 - val\_accuracy: 0.9421

Epoch 44/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 1.0256e-05 - accuracy: 1.0000 - val\_loss: 0.5801 - val\_accuracy: 0.9434

Epoch 45/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 8.2960e-06 - accuracy: 1.0000 - val\_loss: 0.6062 - val\_accuracy: 0.9421

Epoch 46/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 6.6487e-06 - accuracy: 1.0000 - val\_loss: 0.6221 - val\_accuracy: 0.9395

Epoch 47/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 5.2709e-06 - accuracy: 1.0000 - val\_loss: 0.6219 - val\_accuracy: 0.9421

Epoch 48/50

13678/13678 [==============================] - 41s 3ms/sample - loss: 3.9667e-06 - accuracy: 1.0000 - val\_loss: 0.6281 - val\_accuracy: 0.9401

Epoch 49/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 3.0313e-06 - accuracy: 1.0000 - val\_loss: 0.6446 - val\_accuracy: 0.9414

Epoch 50/50

13678/13678 [==============================] - 42s 3ms/sample - loss: 2.4783e-06 - accuracy: 1.0000 - val\_loss: 0.6637 - val\_accuracy: 0.9414