1-conv-32-nodes-0-dense-1637766609

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 10s 744us/sample - loss: 0.4629 - accuracy: 0.7899 - val\_loss: 0.3555 - val\_accuracy: 0.8507

Epoch 2/10

13678/13678 [==============================] - 11s 769us/sample - loss: 0.3335 - accuracy: 0.8718 - val\_loss: 0.3071 - val\_accuracy: 0.8855

Epoch 3/10

13678/13678 [==============================] - 9s 687us/sample - loss: 0.2938 - accuracy: 0.8853 - val\_loss: 0.2962 - val\_accuracy: 0.8882

Epoch 4/10

13678/13678 [==============================] - 9s 694us/sample - loss: 0.2702 - accuracy: 0.8958 - val\_loss: 0.2800 - val\_accuracy: 0.8875

Epoch 5/10

13678/13678 [==============================] - 11s 768us/sample - loss: 0.2489 - accuracy: 0.9046 - val\_loss: 0.2803 - val\_accuracy: 0.8862

Epoch 6/10

13678/13678 [==============================] - 11s 773us/sample - loss: 0.2403 - accuracy: 0.9072 - val\_loss: 0.2791 - val\_accuracy: 0.8921

Epoch 7/10

13678/13678 [==============================] - 11s 806us/sample - loss: 0.2266 - accuracy: 0.9142 - val\_loss: 0.2634 - val\_accuracy: 0.8993

Epoch 8/10

13678/13678 [==============================] - 11s 812us/sample - loss: 0.2156 - accuracy: 0.9190 - val\_loss: 0.2590 - val\_accuracy: 0.9007

Epoch 9/10

13678/13678 [==============================] - 11s 781us/sample - loss: 0.2039 - accuracy: 0.9231 - val\_loss: 0.2539 - val\_accuracy: 0.9033

Epoch 10/10

13678/13678 [==============================] - 11s 784us/sample - loss: 0.1958 - accuracy: 0.9267 - val\_loss: 0.2542 - val\_accuracy: 0.9079

2-conv-32-nodes-0-dense-1637766714

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 21s 2ms/sample - loss: 0.4684 - accuracy: 0.7794 - val\_loss: 0.3419 - val\_accuracy: 0.8678

Epoch 2/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.3080 - accuracy: 0.8818 - val\_loss: 0.3513 - val\_accuracy: 0.8684

Epoch 3/10

13678/13678 [==============================] - 19s 1ms/sample - loss: 0.2620 - accuracy: 0.9008 - val\_loss: 0.2692 - val\_accuracy: 0.8941

Epoch 4/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2372 - accuracy: 0.9115 - val\_loss: 0.2501 - val\_accuracy: 0.9092

Epoch 5/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2234 - accuracy: 0.9167 - val\_loss: 0.2431 - val\_accuracy: 0.9092

Epoch 6/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2039 - accuracy: 0.9221 - val\_loss: 0.2347 - val\_accuracy: 0.9132

Epoch 7/10

13678/13678 [==============================] - 19s 1ms/sample - loss: 0.1913 - accuracy: 0.9297 - val\_loss: 0.2324 - val\_accuracy: 0.9138

Epoch 8/10

13678/13678 [==============================] - 19s 1ms/sample - loss: 0.1818 - accuracy: 0.9341 - val\_loss: 0.2248 - val\_accuracy: 0.9184

Epoch 9/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.1697 - accuracy: 0.9387 - val\_loss: 0.2176 - val\_accuracy: 0.9184

Epoch 10/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.1665 - accuracy: 0.9380 - val\_loss: 0.2182 - val\_accuracy: 0.9191

3-conv-32-nodes-0-dense-1637766913

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.4965 - accuracy: 0.7515 - val\_loss: 0.3464 - val\_accuracy: 0.8697

Epoch 2/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.3011 - accuracy: 0.8841 - val\_loss: 0.2820 - val\_accuracy: 0.8987

Epoch 3/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.2544 - accuracy: 0.9043 - val\_loss: 0.2611 - val\_accuracy: 0.9046

Epoch 4/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.2339 - accuracy: 0.9129 - val\_loss: 0.2611 - val\_accuracy: 0.9007

Epoch 5/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.2104 - accuracy: 0.9215 - val\_loss: 0.2340 - val\_accuracy: 0.9072

Epoch 6/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1932 - accuracy: 0.9294 - val\_loss: 0.2490 - val\_accuracy: 0.9053

Epoch 7/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.1840 - accuracy: 0.9316 - val\_loss: 0.2129 - val\_accuracy: 0.9217

Epoch 8/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1742 - accuracy: 0.9362 - val\_loss: 0.2201 - val\_accuracy: 0.9132

Epoch 9/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1638 - accuracy: 0.9393 - val\_loss: 0.2151 - val\_accuracy: 0.9204

Epoch 10/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1538 - accuracy: 0.9452 - val\_loss: 0.2076 - val\_accuracy: 0.9171

1-conv-64-nodes-0-dense-1637767140

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 21s 2ms/sample - loss: 0.4475 - accuracy: 0.7923 - val\_loss: 0.3947 - val\_accuracy: 0.8092

Epoch 2/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.3199 - accuracy: 0.8750 - val\_loss: 0.2985 - val\_accuracy: 0.8882

Epoch 3/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2737 - accuracy: 0.8941 - val\_loss: 0.2784 - val\_accuracy: 0.8941

Epoch 4/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2491 - accuracy: 0.9062 - val\_loss: 0.2738 - val\_accuracy: 0.8914

Epoch 5/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2344 - accuracy: 0.9101 - val\_loss: 0.2639 - val\_accuracy: 0.9000

Epoch 6/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2189 - accuracy: 0.9180 - val\_loss: 0.2500 - val\_accuracy: 0.9059

Epoch 7/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2068 - accuracy: 0.9204 - val\_loss: 0.2512 - val\_accuracy: 0.9099

Epoch 8/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.1966 - accuracy: 0.9260 - val\_loss: 0.2799 - val\_accuracy: 0.8895

Epoch 9/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.1862 - accuracy: 0.9289 - val\_loss: 0.2421 - val\_accuracy: 0.9118

Epoch 10/10

13678/13678 [==============================] - 21s 2ms/sample - loss: 0.1785 - accuracy: 0.9327 - val\_loss: 0.2377 - val\_accuracy: 0.9112

2-conv-64-nodes-0-dense-1637767341

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.4119 - accuracy: 0.8100 - val\_loss: 0.2861 - val\_accuracy: 0.8908

Epoch 2/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.2584 - accuracy: 0.9014 - val\_loss: 0.2764 - val\_accuracy: 0.8901

Epoch 3/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.2265 - accuracy: 0.9163 - val\_loss: 0.2466 - val\_accuracy: 0.9033

Epoch 4/10

13678/13678 [==============================] - 39s 3ms/sample - loss: 0.1948 - accuracy: 0.9278 - val\_loss: 0.2431 - val\_accuracy: 0.9046

Epoch 5/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1746 - accuracy: 0.9355 - val\_loss: 0.2151 - val\_accuracy: 0.9224

Epoch 6/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1666 - accuracy: 0.9382 - val\_loss: 0.2000 - val\_accuracy: 0.9263

Epoch 7/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1481 - accuracy: 0.9441 - val\_loss: 0.2008 - val\_accuracy: 0.9263

Epoch 8/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1391 - accuracy: 0.9486 - val\_loss: 0.1992 - val\_accuracy: 0.9289

Epoch 9/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1321 - accuracy: 0.9528 - val\_loss: 0.1882 - val\_accuracy: 0.9204

Epoch 10/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1169 - accuracy: 0.9569 - val\_loss: 0.1800 - val\_accuracy: 0.9316

3-conv-64-nodes-0-dense-1637767740

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.4476 - accuracy: 0.7811 - val\_loss: 0.2965 - val\_accuracy: 0.8928

Epoch 2/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.2532 - accuracy: 0.9033 - val\_loss: 0.2435 - val\_accuracy: 0.9066

Epoch 3/10

13678/13678 [==============================] - 43s 3ms/sample - loss: 0.2107 - accuracy: 0.9216 - val\_loss: 0.2217 - val\_accuracy: 0.9158

Epoch 4/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1867 - accuracy: 0.9313 - val\_loss: 0.2408 - val\_accuracy: 0.9072

Epoch 5/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1652 - accuracy: 0.9416 - val\_loss: 0.2092 - val\_accuracy: 0.9178

Epoch 6/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1481 - accuracy: 0.9466 - val\_loss: 0.1728 - val\_accuracy: 0.9309

Epoch 7/10

13678/13678 [==============================] - 43s 3ms/sample - loss: 0.1348 - accuracy: 0.9509 - val\_loss: 0.1644 - val\_accuracy: 0.9368

Epoch 8/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1263 - accuracy: 0.9535 - val\_loss: 0.1675 - val\_accuracy: 0.9355

Epoch 9/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1176 - accuracy: 0.9579 - val\_loss: 0.1688 - val\_accuracy: 0.9309

Epoch 10/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1022 - accuracy: 0.9626 - val\_loss: 0.1647 - val\_accuracy: 0.9388

1-conv-128-nodes-0-dense-1637768179

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.4344 - accuracy: 0.8065 - val\_loss: 0.3410 - val\_accuracy: 0.8651

Epoch 2/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.2945 - accuracy: 0.8849 - val\_loss: 0.3265 - val\_accuracy: 0.8783

Epoch 3/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.2560 - accuracy: 0.9003 - val\_loss: 0.2672 - val\_accuracy: 0.9007

Epoch 4/10

13678/13678 [==============================] - 39s 3ms/sample - loss: 0.2321 - accuracy: 0.9109 - val\_loss: 0.2574 - val\_accuracy: 0.9072

Epoch 5/10

13678/13678 [==============================] - 39s 3ms/sample - loss: 0.2131 - accuracy: 0.9207 - val\_loss: 0.2525 - val\_accuracy: 0.9079

Epoch 6/10

13678/13678 [==============================] - 39s 3ms/sample - loss: 0.1936 - accuracy: 0.9271 - val\_loss: 0.2575 - val\_accuracy: 0.9092

Epoch 7/10

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.1800 - accuracy: 0.9326 - val\_loss: 0.2377 - val\_accuracy: 0.9118

Epoch 8/10

13678/13678 [==============================] - 39s 3ms/sample - loss: 0.1633 - accuracy: 0.9420 - val\_loss: 0.2408 - val\_accuracy: 0.9138

Epoch 9/10

13678/13678 [==============================] - 39s 3ms/sample - loss: 0.1564 - accuracy: 0.9417 - val\_loss: 0.2312 - val\_accuracy: 0.9164

Epoch 10/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1427 - accuracy: 0.9488 - val\_loss: 0.2360 - val\_accuracy: 0.9145

2-conv-128-nodes-0-dense-1637768575

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 88s 6ms/sample - loss: 0.4185 - accuracy: 0.8064 - val\_loss: 0.3006 - val\_accuracy: 0.8901

Epoch 2/10

13678/13678 [==============================] - 88s 6ms/sample - loss: 0.2587 - accuracy: 0.9033 - val\_loss: 0.2437 - val\_accuracy: 0.9092

Epoch 3/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.2125 - accuracy: 0.9218 - val\_loss: 0.2224 - val\_accuracy: 0.9118

Epoch 4/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.1878 - accuracy: 0.9306 - val\_loss: 0.2059 - val\_accuracy: 0.9230

Epoch 5/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.1609 - accuracy: 0.9402 - val\_loss: 0.1921 - val\_accuracy: 0.9243

Epoch 6/10

13678/13678 [==============================] - 88s 6ms/sample - loss: 0.1459 - accuracy: 0.9458 - val\_loss: 0.1869 - val\_accuracy: 0.9309

Epoch 7/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.1373 - accuracy: 0.9487 - val\_loss: 0.2117 - val\_accuracy: 0.9191

Epoch 8/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.1183 - accuracy: 0.9566 - val\_loss: 0.1969 - val\_accuracy: 0.9270

Epoch 9/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.1136 - accuracy: 0.9614 - val\_loss: 0.1966 - val\_accuracy: 0.9355

Epoch 10/10

13678/13678 [==============================] - 87s 6ms/sample - loss: 0.0959 - accuracy: 0.9659 - val\_loss: 0.2154 - val\_accuracy: 0.9283

3-conv-128-nodes-0-dense-1637769449

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.4030 - accuracy: 0.8120 - val\_loss: 0.2850 - val\_accuracy: 0.8921

Epoch 2/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.2359 - accuracy: 0.9133 - val\_loss: 0.2270 - val\_accuracy: 0.9132

Epoch 3/10

13678/13678 [==============================] - 103s 8ms/sample - loss: 0.1946 - accuracy: 0.9289 - val\_loss: 0.1987 - val\_accuracy: 0.9191

Epoch 4/10

13678/13678 [==============================] - 96s 7ms/sample - loss: 0.1664 - accuracy: 0.9407 - val\_loss: 0.1824 - val\_accuracy: 0.9276

Epoch 5/10

13678/13678 [==============================] - 104s 8ms/sample - loss: 0.1492 - accuracy: 0.9456 - val\_loss: 0.1666 - val\_accuracy: 0.9322

Epoch 6/10

13678/13678 [==============================] - 107s 8ms/sample - loss: 0.1334 - accuracy: 0.9535 - val\_loss: 0.1703 - val\_accuracy: 0.9355

Epoch 7/10

13678/13678 [==============================] - 103s 8ms/sample - loss: 0.1149 - accuracy: 0.9596 - val\_loss: 0.1697 - val\_accuracy: 0.9355

Epoch 8/10

13678/13678 [==============================] - 111s 8ms/sample - loss: 0.1040 - accuracy: 0.9607 - val\_loss: 0.1659 - val\_accuracy: 0.9355

Epoch 9/10

13678/13678 [==============================] - 101s 7ms/sample - loss: 0.0913 - accuracy: 0.9670 - val\_loss: 0.1530 - val\_accuracy: 0.9414

Epoch 10/10

13678/13678 [==============================] - 117s 9ms/sample - loss: 0.0818 - accuracy: 0.9707 - val\_loss: 0.2090 - val\_accuracy: 0.9303

1-conv-32-nodes-1-dense-1637770487

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 17s 1ms/sample - loss: 0.4536 - accuracy: 0.7957 - val\_loss: 0.3204 - val\_accuracy: 0.8822

Epoch 2/10

13678/13678 [==============================] - 13s 936us/sample - loss: 0.3094 - accuracy: 0.8781 - val\_loss: 0.2830 - val\_accuracy: 0.8961

Epoch 3/10

13678/13678 [==============================] - 12s 883us/sample - loss: 0.2620 - accuracy: 0.8981 - val\_loss: 0.2970 - val\_accuracy: 0.8783

Epoch 4/10

13678/13678 [==============================] - 14s 1ms/sample - loss: 0.2391 - accuracy: 0.9068 - val\_loss: 0.2587 - val\_accuracy: 0.9000

Epoch 5/10

13678/13678 [==============================] - 13s 945us/sample - loss: 0.2153 - accuracy: 0.9146 - val\_loss: 0.2576 - val\_accuracy: 0.8967

Epoch 6/10

13678/13678 [==============================] - 16s 1ms/sample - loss: 0.1965 - accuracy: 0.9223 - val\_loss: 0.2373 - val\_accuracy: 0.9125

Epoch 7/10

13678/13678 [==============================] - 13s 966us/sample - loss: 0.1813 - accuracy: 0.9282 - val\_loss: 0.2406 - val\_accuracy: 0.8967

Epoch 8/10

13678/13678 [==============================] - 12s 900us/sample - loss: 0.1657 - accuracy: 0.9360 - val\_loss: 0.2383 - val\_accuracy: 0.9099

Epoch 9/10

13678/13678 [==============================] - 12s 861us/sample - loss: 0.1535 - accuracy: 0.9417 - val\_loss: 0.2205 - val\_accuracy: 0.9230

Epoch 10/10

13678/13678 [==============================] - 12s 857us/sample - loss: 0.1415 - accuracy: 0.9453 - val\_loss: 0.2239 - val\_accuracy: 0.9224

2-conv-32-nodes-1-dense-1637770620

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.4341 - accuracy: 0.7997 - val\_loss: 0.3001 - val\_accuracy: 0.8822

Epoch 2/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2682 - accuracy: 0.8982 - val\_loss: 0.2637 - val\_accuracy: 0.8980

Epoch 3/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.2259 - accuracy: 0.9155 - val\_loss: 0.2410 - val\_accuracy: 0.9046

Epoch 4/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.2021 - accuracy: 0.9234 - val\_loss: 0.2177 - val\_accuracy: 0.9171

Epoch 5/10

13678/13678 [==============================] - 21s 2ms/sample - loss: 0.1850 - accuracy: 0.9315 - val\_loss: 0.2185 - val\_accuracy: 0.9125

Epoch 6/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1641 - accuracy: 0.9389 - val\_loss: 0.2165 - val\_accuracy: 0.9158

Epoch 7/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.1491 - accuracy: 0.9430 - val\_loss: 0.2056 - val\_accuracy: 0.9257

Epoch 8/10

13678/13678 [==============================] - 19s 1ms/sample - loss: 0.1332 - accuracy: 0.9493 - val\_loss: 0.1989 - val\_accuracy: 0.9289

Epoch 9/10

13678/13678 [==============================] - 19s 1ms/sample - loss: 0.1225 - accuracy: 0.9547 - val\_loss: 0.1872 - val\_accuracy: 0.9303

Epoch 10/10

13678/13678 [==============================] - 19s 1ms/sample - loss: 0.1146 - accuracy: 0.9590 - val\_loss: 0.2137 - val\_accuracy: 0.9178

3-conv-32-nodes-1-dense-1637770827

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.4548 - accuracy: 0.7827 - val\_loss: 0.3095 - val\_accuracy: 0.8783

Epoch 2/10

13678/13678 [==============================] - 21s 2ms/sample - loss: 0.2558 - accuracy: 0.9029 - val\_loss: 0.2516 - val\_accuracy: 0.9072

Epoch 3/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1999 - accuracy: 0.9248 - val\_loss: 0.1999 - val\_accuracy: 0.9250

Epoch 4/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.1785 - accuracy: 0.9319 - val\_loss: 0.2023 - val\_accuracy: 0.9178

Epoch 5/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.1562 - accuracy: 0.9414 - val\_loss: 0.1882 - val\_accuracy: 0.9224

Epoch 6/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1467 - accuracy: 0.9467 - val\_loss: 0.2369 - val\_accuracy: 0.9066

Epoch 7/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1350 - accuracy: 0.9504 - val\_loss: 0.1791 - val\_accuracy: 0.9309

Epoch 8/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.1242 - accuracy: 0.9544 - val\_loss: 0.1686 - val\_accuracy: 0.9322

Epoch 9/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.1126 - accuracy: 0.9599 - val\_loss: 0.1932 - val\_accuracy: 0.9342

Epoch 10/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.1050 - accuracy: 0.9613 - val\_loss: 0.1956 - val\_accuracy: 0.9316

1-conv-64-nodes-1-dense-1637771064

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 26s 2ms/sample - loss: 0.4866 - accuracy: 0.7556 - val\_loss: 0.3256 - val\_accuracy: 0.8737

Epoch 2/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.3057 - accuracy: 0.8810 - val\_loss: 0.2790 - val\_accuracy: 0.8941

Epoch 3/10

13678/13678 [==============================] - 26s 2ms/sample - loss: 0.2625 - accuracy: 0.8957 - val\_loss: 0.2705 - val\_accuracy: 0.8862

Epoch 4/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.2356 - accuracy: 0.9067 - val\_loss: 0.2875 - val\_accuracy: 0.8842

Epoch 5/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.2178 - accuracy: 0.9121 - val\_loss: 0.2539 - val\_accuracy: 0.9000

Epoch 6/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1990 - accuracy: 0.9209 - val\_loss: 0.2329 - val\_accuracy: 0.9079

Epoch 7/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1766 - accuracy: 0.9281 - val\_loss: 0.2289 - val\_accuracy: 0.9105

Epoch 8/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1618 - accuracy: 0.9354 - val\_loss: 0.2332 - val\_accuracy: 0.9105

Epoch 9/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1506 - accuracy: 0.9386 - val\_loss: 0.2196 - val\_accuracy: 0.9132

Epoch 10/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1336 - accuracy: 0.9452 - val\_loss: 0.2326 - val\_accuracy: 0.9099

2-conv-64-nodes-1-dense-1637771316

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.4046 - accuracy: 0.8116 - val\_loss: 0.3030 - val\_accuracy: 0.8809

Epoch 2/10

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.2368 - accuracy: 0.9077 - val\_loss: 0.2267 - val\_accuracy: 0.9079

Epoch 3/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.1891 - accuracy: 0.9273 - val\_loss: 0.2099 - val\_accuracy: 0.9118

Epoch 4/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.1606 - accuracy: 0.9411 - val\_loss: 0.1874 - val\_accuracy: 0.9257

Epoch 5/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.1373 - accuracy: 0.9482 - val\_loss: 0.1754 - val\_accuracy: 0.9289

Epoch 6/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.1124 - accuracy: 0.9585 - val\_loss: 0.2014 - val\_accuracy: 0.9197

Epoch 7/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0981 - accuracy: 0.9630 - val\_loss: 0.1702 - val\_accuracy: 0.9303

Epoch 8/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0867 - accuracy: 0.9697 - val\_loss: 0.1825 - val\_accuracy: 0.9342

Epoch 9/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0737 - accuracy: 0.9716 - val\_loss: 0.1757 - val\_accuracy: 0.9349

Epoch 10/10

13678/13678 [==============================] - 43s 3ms/sample - loss: 0.0624 - accuracy: 0.9783 - val\_loss: 0.1936 - val\_accuracy: 0.9349

3-conv-64-nodes-1-dense-1637771736

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 48s 4ms/sample - loss: 0.4627 - accuracy: 0.7555 - val\_loss: 0.2930 - val\_accuracy: 0.8928

Epoch 2/10

13678/13678 [==============================] - 55s 4ms/sample - loss: 0.2314 - accuracy: 0.9148 - val\_loss: 0.2232 - val\_accuracy: 0.9138

Epoch 3/10

13678/13678 [==============================] - 47s 3ms/sample - loss: 0.1891 - accuracy: 0.9292 - val\_loss: 0.1958 - val\_accuracy: 0.9243

Epoch 4/10

13678/13678 [==============================] - 46s 3ms/sample - loss: 0.1616 - accuracy: 0.9400 - val\_loss: 0.1834 - val\_accuracy: 0.9283

Epoch 5/10

13678/13678 [==============================] - 50s 4ms/sample - loss: 0.1452 - accuracy: 0.9466 - val\_loss: 0.1723 - val\_accuracy: 0.9296

Epoch 6/10

13678/13678 [==============================] - 49s 4ms/sample - loss: 0.1294 - accuracy: 0.9525 - val\_loss: 0.1586 - val\_accuracy: 0.9375

Epoch 7/10

13678/13678 [==============================] - 49s 4ms/sample - loss: 0.1131 - accuracy: 0.9605 - val\_loss: 0.1773 - val\_accuracy: 0.9276

Epoch 8/10

13678/13678 [==============================] - 49s 4ms/sample - loss: 0.1021 - accuracy: 0.9631 - val\_loss: 0.1692 - val\_accuracy: 0.9342

Epoch 9/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.0929 - accuracy: 0.9663 - val\_loss: 0.1741 - val\_accuracy: 0.9421

Epoch 10/10

13678/13678 [==============================] - 43s 3ms/sample - loss: 0.0862 - accuracy: 0.9689 - val\_loss: 0.1763 - val\_accuracy: 0.9382

1-conv-128-nodes-1-dense-1637772215

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 66s 5ms/sample - loss: 0.4495 - accuracy: 0.7993 - val\_loss: 0.3391 - val\_accuracy: 0.8691

Epoch 2/10

13678/13678 [==============================] - 62s 5ms/sample - loss: 0.2850 - accuracy: 0.8879 - val\_loss: 0.2800 - val\_accuracy: 0.8914

Epoch 3/10

13678/13678 [==============================] - 62s 5ms/sample - loss: 0.2367 - accuracy: 0.9094 - val\_loss: 0.2763 - val\_accuracy: 0.8941

Epoch 4/10

13678/13678 [==============================] - 62s 4ms/sample - loss: 0.2032 - accuracy: 0.9218 - val\_loss: 0.2359 - val\_accuracy: 0.9086

Epoch 5/10

13678/13678 [==============================] - 62s 5ms/sample - loss: 0.1770 - accuracy: 0.9316 - val\_loss: 0.2272 - val\_accuracy: 0.9132

Epoch 6/10

13678/13678 [==============================] - 62s 5ms/sample - loss: 0.1623 - accuracy: 0.9366 - val\_loss: 0.2546 - val\_accuracy: 0.9020

Epoch 7/10

13678/13678 [==============================] - 61s 4ms/sample - loss: 0.1363 - accuracy: 0.9482 - val\_loss: 0.2484 - val\_accuracy: 0.9105

Epoch 8/10

13678/13678 [==============================] - 61s 4ms/sample - loss: 0.1208 - accuracy: 0.9545 - val\_loss: 0.2554 - val\_accuracy: 0.9105

Epoch 9/10

13678/13678 [==============================] - 62s 4ms/sample - loss: 0.1120 - accuracy: 0.9589 - val\_loss: 0.2442 - val\_accuracy: 0.9230

Epoch 10/10

13678/13678 [==============================] - 61s 4ms/sample - loss: 0.0894 - accuracy: 0.9687 - val\_loss: 0.2386 - val\_accuracy: 0.9243

2-conv-128-nodes-1-dense-1637772835

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 92s 7ms/sample - loss: 0.3904 - accuracy: 0.8204 - val\_loss: 0.3796 - val\_accuracy: 0.8421

Epoch 2/10

13678/13678 [==============================] - 95s 7ms/sample - loss: 0.2375 - accuracy: 0.9082 - val\_loss: 0.2374 - val\_accuracy: 0.9072

Epoch 3/10

13678/13678 [==============================] - 91s 7ms/sample - loss: 0.1901 - accuracy: 0.9278 - val\_loss: 0.2032 - val\_accuracy: 0.9217

Epoch 4/10

13678/13678 [==============================] - 91s 7ms/sample - loss: 0.1503 - accuracy: 0.9428 - val\_loss: 0.2131 - val\_accuracy: 0.9224

Epoch 5/10

13678/13678 [==============================] - 90s 7ms/sample - loss: 0.1287 - accuracy: 0.9527 - val\_loss: 0.1898 - val\_accuracy: 0.9164

Epoch 6/10

13678/13678 [==============================] - 91s 7ms/sample - loss: 0.1088 - accuracy: 0.9596 - val\_loss: 0.1911 - val\_accuracy: 0.9303

Epoch 7/10

13678/13678 [==============================] - 91s 7ms/sample - loss: 0.0933 - accuracy: 0.9661 - val\_loss: 0.2004 - val\_accuracy: 0.9368

Epoch 8/10

13678/13678 [==============================] - 93s 7ms/sample - loss: 0.0782 - accuracy: 0.9708 - val\_loss: 0.2121 - val\_accuracy: 0.9243

Epoch 9/10

13678/13678 [==============================] - 93s 7ms/sample - loss: 0.0614 - accuracy: 0.9781 - val\_loss: 0.2214 - val\_accuracy: 0.9316

Epoch 10/10

13678/13678 [==============================] - 106s 8ms/sample - loss: 0.0502 - accuracy: 0.9825 - val\_loss: 0.2567 - val\_accuracy: 0.9322

3-conv-128-nodes-1-dense-1637773768

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 107s 8ms/sample - loss: 0.4176 - accuracy: 0.7960 - val\_loss: 0.2810 - val\_accuracy: 0.8882

Epoch 2/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.2235 - accuracy: 0.9144 - val\_loss: 0.2011 - val\_accuracy: 0.9230

Epoch 3/10

13678/13678 [==============================] - 105s 8ms/sample - loss: 0.1790 - accuracy: 0.9340 - val\_loss: 0.1854 - val\_accuracy: 0.9276

Epoch 4/10

13678/13678 [==============================] - 112s 8ms/sample - loss: 0.1533 - accuracy: 0.9439 - val\_loss: 0.2157 - val\_accuracy: 0.9184

Epoch 5/10

13678/13678 [==============================] - 107s 8ms/sample - loss: 0.1378 - accuracy: 0.9477 - val\_loss: 0.1721 - val\_accuracy: 0.9362

Epoch 6/10

13678/13678 [==============================] - 96s 7ms/sample - loss: 0.1206 - accuracy: 0.9573 - val\_loss: 0.1711 - val\_accuracy: 0.9362

Epoch 7/10

13678/13678 [==============================] - 97s 7ms/sample - loss: 0.1090 - accuracy: 0.9596 - val\_loss: 0.1519 - val\_accuracy: 0.9401

Epoch 8/10

13678/13678 [==============================] - 102s 7ms/sample - loss: 0.0937 - accuracy: 0.9664 - val\_loss: 0.1657 - val\_accuracy: 0.9408

Epoch 9/10

13678/13678 [==============================] - 101s 7ms/sample - loss: 0.0880 - accuracy: 0.9663 - val\_loss: 0.1540 - val\_accuracy: 0.9401

Epoch 10/10

13678/13678 [==============================] - 96s 7ms/sample - loss: 0.0742 - accuracy: 0.9748 - val\_loss: 0.1659 - val\_accuracy: 0.9388

1-conv-32-nodes-2-dense-1637774788

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 13s 923us/sample - loss: 0.4065 - accuracy: 0.8128 - val\_loss: 0.2752 - val\_accuracy: 0.8961

Epoch 2/10

13678/13678 [==============================] - 12s 850us/sample - loss: 0.2576 - accuracy: 0.8968 - val\_loss: 0.2599 - val\_accuracy: 0.8974

Epoch 3/10

13678/13678 [==============================] - 12s 863us/sample - loss: 0.2131 - accuracy: 0.9139 - val\_loss: 0.2440 - val\_accuracy: 0.9046

Epoch 4/10

13678/13678 [==============================] - 12s 866us/sample - loss: 0.1850 - accuracy: 0.9254 - val\_loss: 0.2249 - val\_accuracy: 0.9105

Epoch 5/10

13678/13678 [==============================] - 12s 859us/sample - loss: 0.1536 - accuracy: 0.9388 - val\_loss: 0.2265 - val\_accuracy: 0.9145

Epoch 6/10

13678/13678 [==============================] - 12s 856us/sample - loss: 0.1339 - accuracy: 0.9486 - val\_loss: 0.2205 - val\_accuracy: 0.9204

Epoch 7/10

13678/13678 [==============================] - 12s 886us/sample - loss: 0.1153 - accuracy: 0.9569 - val\_loss: 0.2453 - val\_accuracy: 0.9132

Epoch 8/10

13678/13678 [==============================] - 14s 1ms/sample - loss: 0.0976 - accuracy: 0.9628 - val\_loss: 0.2389 - val\_accuracy: 0.9224

Epoch 9/10

13678/13678 [==============================] - 13s 961us/sample - loss: 0.0823 - accuracy: 0.9693 - val\_loss: 0.2703 - val\_accuracy: 0.9171

Epoch 10/10

13678/13678 [==============================] - 13s 985us/sample - loss: 0.0691 - accuracy: 0.9749 - val\_loss: 0.2942 - val\_accuracy: 0.9112

2-conv-32-nodes-2-dense-1637774912

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 21s 2ms/sample - loss: 0.4431 - accuracy: 0.7900 - val\_loss: 0.3089 - val\_accuracy: 0.8803

Epoch 2/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2843 - accuracy: 0.8896 - val\_loss: 0.2466 - val\_accuracy: 0.8987

Epoch 3/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2307 - accuracy: 0.9093 - val\_loss: 0.2372 - val\_accuracy: 0.9072

Epoch 4/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.2003 - accuracy: 0.9232 - val\_loss: 0.2149 - val\_accuracy: 0.9079

Epoch 5/10

13678/13678 [==============================] - 20s 1ms/sample - loss: 0.1818 - accuracy: 0.9295 - val\_loss: 0.2217 - val\_accuracy: 0.9092

Epoch 6/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1634 - accuracy: 0.9357 - val\_loss: 0.2176 - val\_accuracy: 0.9138

Epoch 7/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1542 - accuracy: 0.9408 - val\_loss: 0.2011 - val\_accuracy: 0.9184

Epoch 8/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1362 - accuracy: 0.9495 - val\_loss: 0.1899 - val\_accuracy: 0.9276

Epoch 9/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.1262 - accuracy: 0.9534 - val\_loss: 0.2242 - val\_accuracy: 0.9178

Epoch 10/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1186 - accuracy: 0.9572 - val\_loss: 0.1970 - val\_accuracy: 0.9230

3-conv-32-nodes-2-dense-1637775127

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.5034 - accuracy: 0.7235 - val\_loss: 0.3212 - val\_accuracy: 0.8855

Epoch 2/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.2698 - accuracy: 0.8963 - val\_loss: 0.2600 - val\_accuracy: 0.9086

Epoch 3/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.2129 - accuracy: 0.9213 - val\_loss: 0.2369 - val\_accuracy: 0.9184

Epoch 4/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1781 - accuracy: 0.9338 - val\_loss: 0.2544 - val\_accuracy: 0.9000

Epoch 5/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.1650 - accuracy: 0.9400 - val\_loss: 0.1858 - val\_accuracy: 0.9342

Epoch 6/10

13678/13678 [==============================] - 24s 2ms/sample - loss: 0.1465 - accuracy: 0.9476 - val\_loss: 0.1872 - val\_accuracy: 0.9316

Epoch 7/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.1359 - accuracy: 0.9498 - val\_loss: 0.1792 - val\_accuracy: 0.9316

Epoch 8/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1278 - accuracy: 0.9545 - val\_loss: 0.1826 - val\_accuracy: 0.9250

Epoch 9/10

13678/13678 [==============================] - 23s 2ms/sample - loss: 0.1150 - accuracy: 0.9591 - val\_loss: 0.1922 - val\_accuracy: 0.9257

Epoch 10/10

13678/13678 [==============================] - 22s 2ms/sample - loss: 0.1063 - accuracy: 0.9623 - val\_loss: 0.1804 - val\_accuracy: 0.9355

1-conv-64-nodes-2-dense-1637775361

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 27s 2ms/sample - loss: 0.3834 - accuracy: 0.8313 - val\_loss: 0.3611 - val\_accuracy: 0.8408

Epoch 2/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.2533 - accuracy: 0.9004 - val\_loss: 0.2754 - val\_accuracy: 0.8849

Epoch 3/10

13678/13678 [==============================] - 28s 2ms/sample - loss: 0.2015 - accuracy: 0.9200 - val\_loss: 0.2435 - val\_accuracy: 0.8987

Epoch 4/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1666 - accuracy: 0.9353 - val\_loss: 0.2349 - val\_accuracy: 0.9086

Epoch 5/10

13678/13678 [==============================] - 25s 2ms/sample - loss: 0.1354 - accuracy: 0.9481 - val\_loss: 0.2630 - val\_accuracy: 0.9026

Epoch 6/10

13678/13678 [==============================] - 26s 2ms/sample - loss: 0.1088 - accuracy: 0.9590 - val\_loss: 0.2654 - val\_accuracy: 0.9000

Epoch 7/10

13678/13678 [==============================] - 29s 2ms/sample - loss: 0.0927 - accuracy: 0.9656 - val\_loss: 0.2484 - val\_accuracy: 0.9217

Epoch 8/10

13678/13678 [==============================] - 31s 2ms/sample - loss: 0.0660 - accuracy: 0.9764 - val\_loss: 0.2750 - val\_accuracy: 0.9211

Epoch 9/10

13678/13678 [==============================] - 31s 2ms/sample - loss: 0.0542 - accuracy: 0.9802 - val\_loss: 0.2948 - val\_accuracy: 0.9158

Epoch 10/10

13678/13678 [==============================] - 29s 2ms/sample - loss: 0.0380 - accuracy: 0.9876 - val\_loss: 0.3212 - val\_accuracy: 0.9059

2-conv-64-nodes-2-dense-1637775637

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.3670 - accuracy: 0.8370 - val\_loss: 0.2403 - val\_accuracy: 0.9039

Epoch 2/10

13678/13678 [==============================] - 47s 3ms/sample - loss: 0.2296 - accuracy: 0.9068 - val\_loss: 0.2201 - val\_accuracy: 0.9079

Epoch 3/10

13678/13678 [==============================] - 46s 3ms/sample - loss: 0.1738 - accuracy: 0.9345 - val\_loss: 0.1957 - val\_accuracy: 0.9224

Epoch 4/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.1428 - accuracy: 0.9451 - val\_loss: 0.1998 - val\_accuracy: 0.9257

Epoch 5/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1208 - accuracy: 0.9544 - val\_loss: 0.1747 - val\_accuracy: 0.9388

Epoch 6/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.1035 - accuracy: 0.9629 - val\_loss: 0.2001 - val\_accuracy: 0.9250

Epoch 7/10

13678/13678 [==============================] - 42s 3ms/sample - loss: 0.0856 - accuracy: 0.9673 - val\_loss: 0.2297 - val\_accuracy: 0.9243

Epoch 8/10

13678/13678 [==============================] - 40s 3ms/sample - loss: 0.0750 - accuracy: 0.9718 - val\_loss: 0.1722 - val\_accuracy: 0.9368

Epoch 9/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.0644 - accuracy: 0.9757 - val\_loss: 0.1846 - val\_accuracy: 0.9428

Epoch 10/10

13678/13678 [==============================] - 41s 3ms/sample - loss: 0.0519 - accuracy: 0.9822 - val\_loss: 0.2183 - val\_accuracy: 0.9395

3-conv-64-nodes-2-dense-1637776071

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 48s 3ms/sample - loss: 0.4090 - accuracy: 0.8014 - val\_loss: 0.2708 - val\_accuracy: 0.9000

Epoch 2/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.2285 - accuracy: 0.9124 - val\_loss: 0.2238 - val\_accuracy: 0.9099

Epoch 3/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1837 - accuracy: 0.9325 - val\_loss: 0.1992 - val\_accuracy: 0.9197

Epoch 4/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.1553 - accuracy: 0.9438 - val\_loss: 0.1917 - val\_accuracy: 0.9217

Epoch 5/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.1371 - accuracy: 0.9496 - val\_loss: 0.1752 - val\_accuracy: 0.9289

Epoch 6/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1226 - accuracy: 0.9558 - val\_loss: 0.1922 - val\_accuracy: 0.9283

Epoch 7/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.1109 - accuracy: 0.9610 - val\_loss: 0.1775 - val\_accuracy: 0.9322

Epoch 8/10

13678/13678 [==============================] - 44s 3ms/sample - loss: 0.0969 - accuracy: 0.9641 - val\_loss: 0.1642 - val\_accuracy: 0.9408

Epoch 9/10

13678/13678 [==============================] - 46s 3ms/sample - loss: 0.0881 - accuracy: 0.9681 - val\_loss: 0.1686 - val\_accuracy: 0.9382

Epoch 10/10

13678/13678 [==============================] - 45s 3ms/sample - loss: 0.0805 - accuracy: 0.9718 - val\_loss: 0.2035 - val\_accuracy: 0.9316

1-conv-128-nodes-2-dense-1637776521

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 67s 5ms/sample - loss: 0.3900 - accuracy: 0.8231 - val\_loss: 0.3647 - val\_accuracy: 0.8316

Epoch 2/10

13678/13678 [==============================] - 64s 5ms/sample - loss: 0.2460 - accuracy: 0.9004 - val\_loss: 0.2840 - val\_accuracy: 0.8934

Epoch 3/10

13678/13678 [==============================] - 65s 5ms/sample - loss: 0.1981 - accuracy: 0.9221 - val\_loss: 0.2652 - val\_accuracy: 0.8954

Epoch 4/10

13678/13678 [==============================] - 65s 5ms/sample - loss: 0.1548 - accuracy: 0.9396 - val\_loss: 0.2271 - val\_accuracy: 0.9132

Epoch 5/10

13678/13678 [==============================] - 63s 5ms/sample - loss: 0.1250 - accuracy: 0.9522 - val\_loss: 0.2597 - val\_accuracy: 0.9132

Epoch 6/10

13678/13678 [==============================] - 64s 5ms/sample - loss: 0.1053 - accuracy: 0.9610 - val\_loss: 0.2330 - val\_accuracy: 0.9138

Epoch 7/10

13678/13678 [==============================] - 62s 5ms/sample - loss: 0.0803 - accuracy: 0.9700 - val\_loss: 0.2738 - val\_accuracy: 0.9184

Epoch 8/10

13678/13678 [==============================] - 63s 5ms/sample - loss: 0.0571 - accuracy: 0.9795 - val\_loss: 0.2945 - val\_accuracy: 0.9217

Epoch 9/10

13678/13678 [==============================] - 65s 5ms/sample - loss: 0.0566 - accuracy: 0.9803 - val\_loss: 0.3227 - val\_accuracy: 0.9158

Epoch 10/10

13678/13678 [==============================] - 63s 5ms/sample - loss: 0.0432 - accuracy: 0.9836 - val\_loss: 0.3859 - val\_accuracy: 0.9066

2-conv-128-nodes-2-dense-1637777162

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 95s 7ms/sample - loss: 0.3901 - accuracy: 0.8177 - val\_loss: 0.2628 - val\_accuracy: 0.8993

Epoch 2/10

13678/13678 [==============================] - 94s 7ms/sample - loss: 0.2195 - accuracy: 0.9159 - val\_loss: 0.2218 - val\_accuracy: 0.9184

Epoch 3/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.1691 - accuracy: 0.9362 - val\_loss: 0.1930 - val\_accuracy: 0.9250

Epoch 4/10

13678/13678 [==============================] - 95s 7ms/sample - loss: 0.1381 - accuracy: 0.9481 - val\_loss: 0.2231 - val\_accuracy: 0.9263

Epoch 5/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.1143 - accuracy: 0.9597 - val\_loss: 0.2004 - val\_accuracy: 0.9322

Epoch 6/10

13678/13678 [==============================] - 99s 7ms/sample - loss: 0.0936 - accuracy: 0.9661 - val\_loss: 0.2239 - val\_accuracy: 0.9375

Epoch 7/10

13678/13678 [==============================] - 104s 8ms/sample - loss: 0.0781 - accuracy: 0.9718 - val\_loss: 0.2087 - val\_accuracy: 0.9316

Epoch 8/10

13678/13678 [==============================] - 101s 7ms/sample - loss: 0.0656 - accuracy: 0.9761 - val\_loss: 0.2262 - val\_accuracy: 0.9289

Epoch 9/10

13678/13678 [==============================] - 96s 7ms/sample - loss: 0.0588 - accuracy: 0.9792 - val\_loss: 0.2609 - val\_accuracy: 0.9309

Epoch 10/10

13678/13678 [==============================] - 95s 7ms/sample - loss: 0.0410 - accuracy: 0.9856 - val\_loss: 0.2821 - val\_accuracy: 0.9217

3-conv-128-nodes-2-dense-1637778137

Train on 13678 samples, validate on 1520 samples

Epoch 1/10

13678/13678 [==============================] - 102s 7ms/sample - loss: 0.4080 - accuracy: 0.7992 - val\_loss: 0.2449 - val\_accuracy: 0.9079

Epoch 2/10

13678/13678 [==============================] - 101s 7ms/sample - loss: 0.2213 - accuracy: 0.9148 - val\_loss: 0.2014 - val\_accuracy: 0.9164

Epoch 3/10

13678/13678 [==============================] - 100s 7ms/sample - loss: 0.1788 - accuracy: 0.9332 - val\_loss: 0.1873 - val\_accuracy: 0.9283

Epoch 4/10

13678/13678 [==============================] - 99s 7ms/sample - loss: 0.1484 - accuracy: 0.9447 - val\_loss: 0.1690 - val\_accuracy: 0.9382

Epoch 5/10

13678/13678 [==============================] - 99s 7ms/sample - loss: 0.1359 - accuracy: 0.9500 - val\_loss: 0.1731 - val\_accuracy: 0.9303

Epoch 6/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.1235 - accuracy: 0.9536 - val\_loss: 0.1678 - val\_accuracy: 0.9342

Epoch 7/10

13678/13678 [==============================] - 99s 7ms/sample - loss: 0.1108 - accuracy: 0.9599 - val\_loss: 0.1718 - val\_accuracy: 0.9368

Epoch 8/10

13678/13678 [==============================] - 98s 7ms/sample - loss: 0.0940 - accuracy: 0.9650 - val\_loss: 0.1581 - val\_accuracy: 0.9441

Epoch 9/10

13678/13678 [==============================] - 99s 7ms/sample - loss: 0.0891 - accuracy: 0.9671 - val\_loss: 0.1496 - val\_accuracy: 0.9454

Epoch 10/10

13678/13678 [==============================] - 101s 7ms/sample - loss: 0.0752 - accuracy: 0.9735 - val\_loss: 0.1551 - val\_accuracy: 0.9447