Epoch 1/50

2022-05-23 12:55:08.440823: I tensorflow/stream\_executor/cuda/cuda\_dnn.cc:369] Loaded cuDNN version 8005

65/65 [==============================] - 39s 421ms/step - loss: 1.0935 - accuracy: 0.6606 - precision: 0.2683 - recall: 0.0106 - auc: 0.5551 - f1\_score: 0.0184 - val\_loss: 0.9964 - val\_accuracy: 0.6667 - val\_precision: 0.0000e+00 - val\_recall: 0.0000e+00 - val\_auc: 0.9238 - val\_f1\_score: 0.0000e+00

Epoch 00001: val\_accuracy improved from -inf to 0.66667, saving model to covid\_19\_xception2.h5

/opt/conda/lib/python3.7/site-packages/keras/utils/generic\_utils.py:497: CustomMaskWarning: Custom mask layers require a config and must override get\_config. When loading, the custom mask layer must be passed to the custom\_objects argument.

category=CustomMaskWarning)

Epoch 2/50

65/65 [==============================] - 25s 382ms/step - loss: 1.0217 - accuracy: 0.6830 - precision: 0.6032 - recall: 0.1433 - auc: 0.6533 - f1\_score: 0.2141 - val\_loss: 1.0320 - val\_accuracy: 0.5664 - val\_precision: 0.0000e+00 - val\_recall: 0.0000e+00 - val\_auc: 0.6421 - val\_f1\_score: 0.0000e+00

Epoch 00002: val\_accuracy did not improve from 0.66667

Epoch 3/50

65/65 [==============================] - 24s 373ms/step - loss: 0.9268 - accuracy: 0.7071 - precision: 0.6250 - recall: 0.3029 - auc: 0.7390 - f1\_score: 0.4007 - val\_loss: 0.9439 - val\_accuracy: 0.5833 - val\_precision: 0.0294 - val\_recall: 0.0078 - val\_auc: 0.6679 - val\_f1\_score: 0.0104

Epoch 00003: val\_accuracy did not improve from 0.66667

Epoch 4/50

65/65 [==============================] - 25s 382ms/step - loss: 0.8622 - accuracy: 0.7279 - precision: 0.6445 - recall: 0.4096 - auc: 0.7875 - f1\_score: 0.4960 - val\_loss: 0.7492 - val\_accuracy: 0.6914 - val\_precision: 0.5477 - val\_recall: 0.4258 - val\_auc: 0.8013 - val\_f1\_score: 0.4673

Epoch 00004: val\_accuracy improved from 0.66667 to 0.69141, saving model to covid\_19\_xception2.h5

Epoch 5/50

65/65 [==============================] - 23s 361ms/step - loss: 0.7586 - accuracy: 0.7955 - precision: 0.7393 - recall: 0.5971 - auc: 0.8445 - f1\_score: 0.6576 - val\_loss: 0.3141 - val\_accuracy: 0.9557 - val\_precision: 0.9549 - val\_recall: 0.9102 - val\_auc: 0.9898 - val\_f1\_score: 0.9303

Epoch 00005: val\_accuracy improved from 0.69141 to 0.95573, saving model to covid\_19\_xception2.h5

Epoch 6/50

65/65 [==============================] - 23s 359ms/step - loss: 0.6463 - accuracy: 0.8183 - precision: 0.7631 - recall: 0.6596 - auc: 0.8864 - f1\_score: 0.7064 - val\_loss: 0.3855 - val\_accuracy: 0.9102 - val\_precision: 0.8725 - val\_recall: 0.8555 - val\_auc: 0.9618 - val\_f1\_score: 0.8634

Epoch 00006: val\_accuracy did not improve from 0.95573

Epoch 7/50

65/65 [==============================] - 24s 362ms/step - loss: 0.6827 - accuracy: 0.8221 - precision: 0.7791 - recall: 0.6510 - auc: 0.8772 - f1\_score: 0.7072 - val\_loss: 0.5761 - val\_accuracy: 0.8698 - val\_precision: 0.8145 - val\_recall: 0.7891 - val\_auc: 0.9129 - val\_f1\_score: 0.8004

Epoch 00007: val\_accuracy did not improve from 0.95573

Epoch 8/50

65/65 [==============================] - 24s 362ms/step - loss: 0.5943 - accuracy: 0.8439 - precision: 0.7983 - recall: 0.7115 - auc: 0.9055 - f1\_score: 0.7493 - val\_loss: 0.2919 - val\_accuracy: 0.9505 - val\_precision: 0.9325 - val\_recall: 0.9180 - val\_auc: 0.9792 - val\_f1\_score: 0.9243

Epoch 00008: val\_accuracy did not improve from 0.95573

Epoch 9/50

65/65 [==============================] - 22s 342ms/step - loss: 0.5752 - accuracy: 0.8590 - precision: 0.8185 - recall: 0.7413 - auc: 0.9114 - f1\_score: 0.7765 - val\_loss: 0.3507 - val\_accuracy: 0.9440 - val\_precision: 0.9176 - val\_recall: 0.9141 - val\_auc: 0.9531 - val\_f1\_score: 0.9151

Epoch 00009: val\_accuracy did not improve from 0.95573

Epoch 10/50

65/65 [==============================] - 22s 343ms/step - loss: 0.5238 - accuracy: 0.8712 - precision: 0.8358 - recall: 0.7635 - auc: 0.9283 - f1\_score: 0.7966 - val\_loss: 0.1022 - val\_accuracy: 0.9805 - val\_precision: 0.9763 - val\_recall: 0.9648 - val\_auc: 0.9985 - val\_f1\_score: 0.9697

Epoch 00010: val\_accuracy improved from 0.95573 to 0.98047, saving model to covid\_19\_xception2.h5

Epoch 11/50

65/65 [==============================] - 22s 331ms/step - loss: 0.4738 - accuracy: 0.8865 - precision: 0.8486 - recall: 0.8029 - auc: 0.9392 - f1\_score: 0.8239 - val\_loss: 0.3654 - val\_accuracy: 0.9154 - val\_precision: 0.8805 - val\_recall: 0.8633 - val\_auc: 0.9585 - val\_f1\_score: 0.8707

Epoch 00011: val\_accuracy did not improve from 0.98047

Epoch 12/50

65/65 [==============================] - 22s 338ms/step - loss: 0.4909 - accuracy: 0.8776 - precision: 0.8378 - recall: 0.7846 - auc: 0.9348 - f1\_score: 0.8085 - val\_loss: 0.1192 - val\_accuracy: 0.9779 - val\_precision: 0.9723 - val\_recall: 0.9609 - val\_auc: 0.9955 - val\_f1\_score: 0.9650

Epoch 00012: val\_accuracy did not improve from 0.98047

Epoch 13/50

65/65 [==============================] - 22s 333ms/step - loss: 0.4230 - accuracy: 0.8965 - precision: 0.8603 - recall: 0.8231 - auc: 0.9520 - f1\_score: 0.8406 - val\_loss: 0.3087 - val\_accuracy: 0.9323 - val\_precision: 0.9048 - val\_recall: 0.8906 - val\_auc: 0.9736 - val\_f1\_score: 0.8974

Epoch 00013: val\_accuracy did not improve from 0.98047

Epoch 14/50

65/65 [==============================] - 21s 327ms/step - loss: 0.4466 - accuracy: 0.8968 - precision: 0.8604 - recall: 0.8240 - auc: 0.9458 - f1\_score: 0.8407 - val\_loss: 0.0829 - val\_accuracy: 0.9909 - val\_precision: 0.9882 - val\_recall: 0.9844 - val\_auc: 0.9997 - val\_f1\_score: 0.9860

Epoch 00014: val\_accuracy improved from 0.98047 to 0.99089, saving model to covid\_19\_xception2.h5

Epoch 15/50

65/65 [==============================] - 21s 327ms/step - loss: 0.4306 - accuracy: 0.8946 - precision: 0.8631 - recall: 0.8125 - auc: 0.9505 - f1\_score: 0.8367 - val\_loss: 0.1028 - val\_accuracy: 0.9792 - val\_precision: 0.9688 - val\_recall: 0.9688 - val\_auc: 0.9979 - val\_f1\_score: 0.9688

Epoch 00015: val\_accuracy did not improve from 0.99089

Epoch 16/50

65/65 [==============================] - 21s 315ms/step - loss: 0.4683 - accuracy: 0.8846 - precision: 0.8441 - recall: 0.8019 - auc: 0.9397 - f1\_score: 0.8217 - val\_loss: 0.1961 - val\_accuracy: 0.9714 - val\_precision: 0.9570 - val\_recall: 0.9570 - val\_auc: 0.9855 - val\_f1\_score: 0.9570

Epoch 00016: val\_accuracy did not improve from 0.99089

Epoch 17/50

65/65 [==============================] - 21s 329ms/step - loss: 0.3942 - accuracy: 0.9071 - precision: 0.8750 - recall: 0.8413 - auc: 0.9575 - f1\_score: 0.8571 - val\_loss: 0.1093 - val\_accuracy: 0.9818 - val\_precision: 0.9727 - val\_recall: 0.9727 - val\_auc: 0.9977 - val\_f1\_score: 0.9727

Epoch 00017: val\_accuracy did not improve from 0.99089

Epoch 18/50

65/65 [==============================] - 20s 311ms/step - loss: 0.3955 - accuracy: 0.9099 - precision: 0.8791 - recall: 0.8462 - auc: 0.9567 - f1\_score: 0.8619 - val\_loss: 0.2141 - val\_accuracy: 0.9531 - val\_precision: 0.9331 - val\_recall: 0.9258 - val\_auc: 0.9859 - val\_f1\_score: 0.9287

Epoch 00018: val\_accuracy did not improve from 0.99089

Epoch 19/50

65/65 [==============================] - 21s 322ms/step - loss: 0.3535 - accuracy: 0.9215 - precision: 0.8940 - recall: 0.8673 - auc: 0.9653 - f1\_score: 0.8800 - val\_loss: 0.2715 - val\_accuracy: 0.9466 - val\_precision: 0.9216 - val\_recall: 0.9180 - val\_auc: 0.9733 - val\_f1\_score: 0.9195

Epoch 00019: val\_accuracy did not improve from 0.99089

Epoch 20/50

65/65 [==============================] - 20s 312ms/step - loss: 0.3630 - accuracy: 0.9164 - precision: 0.8873 - recall: 0.8582 - auc: 0.9637 - f1\_score: 0.8716 - val\_loss: 0.0896 - val\_accuracy: 0.9818 - val\_precision: 0.9764 - val\_recall: 0.9688 - val\_auc: 0.9979 - val\_f1\_score: 0.9724

Epoch 00020: val\_accuracy did not improve from 0.99089

Epoch 21/50

65/65 [==============================] - 21s 320ms/step - loss: 0.3605 - accuracy: 0.9163 - precision: 0.8891 - recall: 0.8558 - auc: 0.9635 - f1\_score: 0.8715 - val\_loss: 0.0459 - val\_accuracy: 0.9948 - val\_precision: 0.9922 - val\_recall: 0.9922 - val\_auc: 0.9997 - val\_f1\_score: 0.9922

Epoch 00021: val\_accuracy improved from 0.99089 to 0.99479, saving model to covid\_19\_xception2.h5

Epoch 22/50

65/65 [==============================] - 21s 322ms/step - loss: 0.3569 - accuracy: 0.9167 - precision: 0.8892 - recall: 0.8567 - auc: 0.9643 - f1\_score: 0.8721 - val\_loss: 0.0988 - val\_accuracy: 0.9870 - val\_precision: 0.9843 - val\_recall: 0.9766 - val\_auc: 0.9969 - val\_f1\_score: 0.9802

Epoch 00022: val\_accuracy did not improve from 0.99479

Epoch 23/50

65/65 [==============================] - 21s 321ms/step - loss: 0.3445 - accuracy: 0.9202 - precision: 0.8920 - recall: 0.8654 - auc: 0.9664 - f1\_score: 0.8777 - val\_loss: 0.1514 - val\_accuracy: 0.9766 - val\_precision: 0.9685 - val\_recall: 0.9609 - val\_auc: 0.9887 - val\_f1\_score: 0.9642

Epoch 00023: val\_accuracy did not improve from 0.99479

Epoch 24/50

65/65 [==============================] - 21s 325ms/step - loss: 0.3645 - accuracy: 0.9064 - precision: 0.8770 - recall: 0.8365 - auc: 0.9632 - f1\_score: 0.8558 - val\_loss: 0.1168 - val\_accuracy: 0.9805 - val\_precision: 0.9725 - val\_recall: 0.9688 - val\_auc: 0.9944 - val\_f1\_score: 0.9706

Epoch 00024: val\_accuracy did not improve from 0.99479

Epoch 25/50

65/65 [==============================] - 20s 309ms/step - loss: 0.3359 - accuracy: 0.9208 - precision: 0.8937 - recall: 0.8654 - auc: 0.9690 - f1\_score: 0.8790 - val\_loss: 0.0922 - val\_accuracy: 0.9805 - val\_precision: 0.9725 - val\_recall: 0.9688 - val\_auc: 0.9981 - val\_f1\_score: 0.9701

Epoch 00025: val\_accuracy did not improve from 0.99479

Epoch 26/50

65/65 [==============================] - 21s 328ms/step - loss: 0.3075 - accuracy: 0.9254 - precision: 0.8950 - recall: 0.8795 - auc: 0.9723 - f1\_score: 0.8873 - val\_loss: 0.0633 - val\_accuracy: 0.9883 - val\_precision: 0.9843 - val\_recall: 0.9805 - val\_auc: 0.9988 - val\_f1\_score: 0.9824

Epoch 00026: val\_accuracy did not improve from 0.99479

Epoch 27/50

65/65 [==============================] - 20s 308ms/step - loss: 0.2969 - accuracy: 0.9279 - precision: 0.8999 - recall: 0.8817 - auc: 0.9747 - f1\_score: 0.8907 - val\_loss: 0.1610 - val\_accuracy: 0.9661 - val\_precision: 0.9563 - val\_recall: 0.9414 - val\_auc: 0.9913 - val\_f1\_score: 0.9478

Epoch 00027: val\_accuracy did not improve from 0.99479

Epoch 28/50

65/65 [==============================] - 20s 311ms/step - loss: 0.3232 - accuracy: 0.9244 - precision: 0.8949 - recall: 0.8760 - auc: 0.9694 - f1\_score: 0.8850 - val\_loss: 0.0723 - val\_accuracy: 0.9818 - val\_precision: 0.9727 - val\_recall: 0.9727 - val\_auc: 0.9986 - val\_f1\_score: 0.9727

Epoch 00028: val\_accuracy did not improve from 0.99479

Epoch 29/50

65/65 [==============================] - 20s 311ms/step - loss: 0.3140 - accuracy: 0.9346 - precision: 0.9090 - recall: 0.8933 - auc: 0.9713 - f1\_score: 0.9006 - val\_loss: 0.0608 - val\_accuracy: 0.9870 - val\_precision: 0.9843 - val\_recall: 0.9766 - val\_auc: 0.9991 - val\_f1\_score: 0.9800

Epoch 00029: val\_accuracy did not improve from 0.99479

Epoch 30/50

65/65 [==============================] - 19s 294ms/step - loss: 0.3179 - accuracy: 0.9234 - precision: 0.9001 - recall: 0.8663 - auc: 0.9708 - f1\_score: 0.8827 - val\_loss: 0.0644 - val\_accuracy: 0.9844 - val\_precision: 0.9803 - val\_recall: 0.9727 - val\_auc: 0.9989 - val\_f1\_score: 0.9764

Epoch 00030: val\_accuracy did not improve from 0.99479

Epoch 31/50

65/65 [==============================] - 20s 306ms/step - loss: 0.2851 - accuracy: 0.9304 - precision: 0.9022 - recall: 0.8875 - auc: 0.9773 - f1\_score: 0.8947 - val\_loss: 0.1094 - val\_accuracy: 0.9753 - val\_precision: 0.9684 - val\_recall: 0.9570 - val\_auc: 0.9968 - val\_f1\_score: 0.9619

Epoch 00031: val\_accuracy did not improve from 0.99479

Epoch 32/50

65/65 [==============================] - 19s 295ms/step - loss: 0.2781 - accuracy: 0.9391 - precision: 0.9134 - recall: 0.9029 - auc: 0.9773 - f1\_score: 0.9081 - val\_loss: 0.1706 - val\_accuracy: 0.9701 - val\_precision: 0.9605 - val\_recall: 0.9492 - val\_auc: 0.9903 - val\_f1\_score: 0.9541

Epoch 00032: val\_accuracy did not improve from 0.99479

Epoch 33/50

65/65 [==============================] - 20s 308ms/step - loss: 0.2678 - accuracy: 0.9446 - precision: 0.9238 - recall: 0.9087 - auc: 0.9793 - f1\_score: 0.9159 - val\_loss: 0.1220 - val\_accuracy: 0.9727 - val\_precision: 0.9608 - val\_recall: 0.9570 - val\_auc: 0.9958 - val\_f1\_score: 0.9588

Epoch 00033: val\_accuracy did not improve from 0.99479

Epoch 34/50

65/65 [==============================] - 20s 305ms/step - loss: 0.2464 - accuracy: 0.9490 - precision: 0.9281 - recall: 0.9183 - auc: 0.9811 - f1\_score: 0.9229 - val\_loss: 0.0582 - val\_accuracy: 0.9896 - val\_precision: 0.9844 - val\_recall: 0.9844 - val\_auc: 0.9989 - val\_f1\_score: 0.9844

Epoch 00034: val\_accuracy did not improve from 0.99479

Epoch 35/50

65/65 [==============================] - 19s 289ms/step - loss: 0.2834 - accuracy: 0.9370 - precision: 0.9143 - recall: 0.8949 - auc: 0.9761 - f1\_score: 0.9043 - val\_loss: 0.1315 - val\_accuracy: 0.9766 - val\_precision: 0.9685 - val\_recall: 0.9609 - val\_auc: 0.9937 - val\_f1\_score: 0.9642

Epoch 00035: val\_accuracy did not improve from 0.99479

Epoch 36/50

65/65 [==============================] - 19s 298ms/step - loss: 0.2696 - accuracy: 0.9423 - precision: 0.9216 - recall: 0.9038 - auc: 0.9786 - f1\_score: 0.9124 - val\_loss: 0.1420 - val\_accuracy: 0.9779 - val\_precision: 0.9686 - val\_recall: 0.9648 - val\_auc: 0.9925 - val\_f1\_score: 0.9666

Epoch 00036: val\_accuracy did not improve from 0.99479

Epoch 37/50

65/65 [==============================] - 19s 300ms/step - loss: 0.2690 - accuracy: 0.9375 - precision: 0.9138 - recall: 0.8971 - auc: 0.9784 - f1\_score: 0.9050 - val\_loss: 0.1161 - val\_accuracy: 0.9779 - val\_precision: 0.9686 - val\_recall: 0.9648 - val\_auc: 0.9950 - val\_f1\_score: 0.9661

Epoch 00037: val\_accuracy did not improve from 0.99479

Epoch 38/50

65/65 [==============================] - 20s 303ms/step - loss: 0.2445 - accuracy: 0.9354 - precision: 0.9074 - recall: 0.8978 - auc: 0.9828 - f1\_score: 0.9025 - val\_loss: 0.1425 - val\_accuracy: 0.9766 - val\_precision: 0.9648 - val\_recall: 0.9648 - val\_auc: 0.9901 - val\_f1\_score: 0.9648

Epoch 00038: val\_accuracy did not improve from 0.99479

Epoch 39/50

65/65 [==============================] - 21s 317ms/step - loss: 0.2734 - accuracy: 0.9417 - precision: 0.9181 - recall: 0.9058 - auc: 0.9781 - f1\_score: 0.9116 - val\_loss: 0.1142 - val\_accuracy: 0.9805 - val\_precision: 0.9725 - val\_recall: 0.9688 - val\_auc: 0.9945 - val\_f1\_score: 0.9701

Epoch 00039: val\_accuracy did not improve from 0.99479

Epoch 40/50

65/65 [==============================] - 20s 303ms/step - loss: 0.2375 - accuracy: 0.9413 - precision: 0.9189 - recall: 0.9038 - auc: 0.9831 - f1\_score: 0.9109 - val\_loss: 0.0511 - val\_accuracy: 0.9857 - val\_precision: 0.9804 - val\_recall: 0.9766 - val\_auc: 0.9993 - val\_f1\_score: 0.9782

Epoch 00040: val\_accuracy did not improve from 0.99479

Epoch 41/50

65/65 [==============================] - 19s 292ms/step - loss: 0.2472 - accuracy: 0.9420 - precision: 0.9158 - recall: 0.9096 - auc: 0.9817 - f1\_score: 0.9126 - val\_loss: 0.0756 - val\_accuracy: 0.9818 - val\_precision: 0.9727 - val\_recall: 0.9727 - val\_auc: 0.9982 - val\_f1\_score: 0.9727

Epoch 00041: val\_accuracy did not improve from 0.99479

Epoch 42/50

65/65 [==============================] - 19s 299ms/step - loss: 0.2293 - accuracy: 0.9420 - precision: 0.9166 - recall: 0.9087 - auc: 0.9843 - f1\_score: 0.9126 - val\_loss: 0.0637 - val\_accuracy: 0.9792 - val\_precision: 0.9688 - val\_recall: 0.9688 - val\_auc: 0.9992 - val\_f1\_score: 0.9688

Epoch 00042: val\_accuracy did not improve from 0.99479

Epoch 43/50

65/65 [==============================] - 20s 300ms/step - loss: 0.2289 - accuracy: 0.9426 - precision: 0.9216 - recall: 0.9048 - auc: 0.9846 - f1\_score: 0.9129 - val\_loss: 0.0434 - val\_accuracy: 0.9870 - val\_precision: 0.9843 - val\_recall: 0.9766 - val\_auc: 0.9996 - val\_f1\_score: 0.9797

Epoch 00043: val\_accuracy did not improve from 0.99479

Epoch 44/50

65/65 [==============================] - 18s 283ms/step - loss: 0.2620 - accuracy: 0.9367 - precision: 0.9110 - recall: 0.8978 - auc: 0.9805 - f1\_score: 0.9038 - val\_loss: 0.0697 - val\_accuracy: 0.9818 - val\_precision: 0.9727 - val\_recall: 0.9727 - val\_auc: 0.9989 - val\_f1\_score: 0.9727

Epoch 00044: val\_accuracy did not improve from 0.99479

Epoch 45/50

65/65 [==============================] - 19s 297ms/step - loss: 0.2252 - accuracy: 0.9529 - precision: 0.9339 - recall: 0.9240 - auc: 0.9844 - f1\_score: 0.9290 - val\_loss: 0.0747 - val\_accuracy: 0.9792 - val\_precision: 0.9688 - val\_recall: 0.9688 - val\_auc: 0.9989 - val\_f1\_score: 0.9688

Epoch 00045: val\_accuracy did not improve from 0.99479

Epoch 46/50

65/65 [==============================] - 19s 287ms/step - loss: 0.2843 - accuracy: 0.9356 - precision: 0.9117 - recall: 0.8933 - auc: 0.9763 - f1\_score: 0.9020 - val\_loss: 0.1020 - val\_accuracy: 0.9792 - val\_precision: 0.9688 - val\_recall: 0.9688 - val\_auc: 0.9972 - val\_f1\_score: 0.9688

Epoch 00046: val\_accuracy did not improve from 0.99479

Epoch 47/50

65/65 [==============================] - 19s 295ms/step - loss: 0.2355 - accuracy: 0.9470 - precision: 0.9241 - recall: 0.9161 - auc: 0.9835 - f1\_score: 0.9196 - val\_loss: 0.0956 - val\_accuracy: 0.9844 - val\_precision: 0.9766 - val\_recall: 0.9766 - val\_auc: 0.9974 - val\_f1\_score: 0.9766

Epoch 00047: val\_accuracy did not improve from 0.99479

Epoch 48/50

65/65 [==============================] - 19s 293ms/step - loss: 0.1930 - accuracy: 0.9561 - precision: 0.9379 - recall: 0.9298 - auc: 0.9887 - f1\_score: 0.9337 - val\_loss: 0.0640 - val\_accuracy: 0.9857 - val\_precision: 0.9804 - val\_recall: 0.9766 - val\_auc: 0.9992 - val\_f1\_score: 0.9782

Epoch 00048: val\_accuracy did not improve from 0.99479

Epoch 49/50

65/65 [==============================] - 19s 285ms/step - loss: 0.2381 - accuracy: 0.9446 - precision: 0.9246 - recall: 0.9077 - auc: 0.9834 - f1\_score: 0.9157 - val\_loss: 0.1144 - val\_accuracy: 0.9753 - val\_precision: 0.9647 - val\_recall: 0.9609 - val\_auc: 0.9961 - val\_f1\_score: 0.9623

Epoch 00049: val\_accuracy did not improve from 0.99479

Epoch 50/50

65/65 [==============================] - 20s 300ms/step - loss: 0.2227 - accuracy: 0.9471 - precision: 0.9260 - recall: 0.9144 - auc: 0.9846 - f1\_score: 0.9199 - val\_loss: 0.0938 - val\_accuracy: 0.9714 - val\_precision: 0.9570 - val\_recall: 0.9570 - val\_auc: 0.9978 - val\_f1\_score: 0.9570

Epoch 00050: val\_accuracy did not improve from 0.99479