

New dataset - fault on Rails

1st training -

Found 560 images belonging to 2 classes.

Found 158 images belonging to 2 classes.

2021-11-04 08:43:03.580479: I tensorflow/core/profiler/lib/profiler_session.cc:131] Profiler session initializing.

2021-11-04 08:43:03.580544: I tensorflow/core/profiler/lib/profiler_session.cc:146] Profiler session started.

2021-11-04 08:43:03.905446: I tensorflow/core/profiler/lib/profiler_session.cc:164] Profiler session tear down.

2021-11-04 08:43:03.905639: I tensorflow/core/profiler/internal/gpu/cupti_tracer.cc:1748] CUPTI activity buffer flushed

Epoch 1/100

70/70 [=====] - 187s 2s/step - loss: 11.6900 - accuracy: 0.7589 - val_loss: 1.6921 - val_accuracy: 0.6835

Epoch 2/100

70/70 [=====] - 147s 2s/step - loss: 1.0336 - accuracy: 0.8982 - val_loss: 1.3529 - val_accuracy: 0.7152

Epoch 3/100

70/70 [=====] - 146s 2s/step - loss: 0.8667 - accuracy: 0.9232 - val_loss: 0.8615 - val_accuracy: 0.8987

Epoch 4/100

70/70 [=====] - 149s 2s/step - loss: 0.8062 - accuracy: 0.9357 - val_loss: 1.1242 - val_accuracy: 0.8291

Epoch 5/100

70/70 [=====] - 149s 2s/step - loss: 0.7877 - accuracy: 0.9304 - val_loss: 1.0370 - val_accuracy: 0.8671

Epoch 6/100

70/70 [=====] - 152s 2s/step - loss: 0.7194 - accuracy: 0.9554 - val_loss: 1.0077 - val_accuracy: 0.8354

Epoch 7/100

70/70 [=====] - 149s 2s/step - loss: 0.7261 - accuracy: 0.9554 - val_loss: 0.5373 - val_accuracy: 0.9937

Epoch 8/100

70/70 [=====] - 150s 2s/step - loss: 0.6301 - accuracy: 0.9643 - val_loss: 0.5259 - val_accuracy: 0.9810

Epoch 9/100

70/70 [=====] - 149s 2s/step - loss: 0.6549 - accuracy: 0.9518 - val_loss: 0.5398 - val_accuracy: 0.9873

Epoch 10/100

70/70 [=====] - 146s 2s/step - loss: 0.5765 - accuracy: 0.9714
- val_loss: 0.8812 - val_accuracy: 0.8861
Epoch 11/100
70/70 [=====] - 146s 2s/step - loss: 0.6802 - accuracy: 0.9643
- val_loss: 0.6300 - val_accuracy: 0.9620
Epoch 12/100
70/70 [=====] - 151s 2s/step - loss: 0.5769 - accuracy: 0.9786
- val_loss: 0.8259 - val_accuracy: 0.9241
Epoch 13/100
70/70 [=====] - 149s 2s/step - loss: 0.5689 - accuracy: 0.9857
- val_loss: 0.6996 - val_accuracy: 0.9051
Epoch 14/100
70/70 [=====] - 145s 2s/step - loss: 0.5392 - accuracy: 0.9821
- val_loss: 0.6433 - val_accuracy: 0.9557
Epoch 15/100
70/70 [=====] - 147s 2s/step - loss: 0.4930 - accuracy: 0.9946
- val_loss: 0.4653 - val_accuracy: 0.9873
Epoch 16/100
70/70 [=====] - 149s 2s/step - loss: 0.5201 - accuracy: 0.9857
- val_loss: 0.6314 - val_accuracy: 0.9430
Epoch 17/100
70/70 [=====] - 149s 2s/step - loss: 0.4982 - accuracy: 0.9946
- val_loss: 0.4658 - val_accuracy: 0.9873
Epoch 18/100
70/70 [=====] - 145s 2s/step - loss: 0.4429 - accuracy: 0.9964
- val_loss: 0.5242 - val_accuracy: 0.9873
Epoch 19/100
70/70 [=====] - 145s 2s/step - loss: 0.6360 - accuracy: 0.9839
- val_loss: 0.7428 - val_accuracy: 0.9810
Epoch 20/100
70/70 [=====] - 150s 2s/step - loss: 0.5655 - accuracy: 0.9768
- val_loss: 0.5575 - val_accuracy: 0.9747
Epoch 21/100
70/70 [=====] - 147s 2s/step - loss: 0.5265 - accuracy: 0.9804
- val_loss: 0.4603 - val_accuracy: 0.9873
Epoch 22/100
70/70 [=====] - 149s 2s/step - loss: 0.5627 - accuracy: 0.9750
- val_loss: 0.7798 - val_accuracy: 0.9051
Epoch 23/100
70/70 [=====] - 147s 2s/step - loss: 0.5023 - accuracy: 0.9804
- val_loss: 0.4581 - val_accuracy: 0.9430
Epoch 24/100
70/70 [=====] - 149s 2s/step - loss: 0.3412 - accuracy: 0.9982
- val_loss: 0.3670 - val_accuracy: 0.9810

Epoch 25/100
70/70 [=====] - 148s 2s/step - loss: 0.3949 - accuracy: 0.9929
- val_loss: 0.4850 - val_accuracy: 0.9810

Epoch 26/100
70/70 [=====] - 145s 2s/step - loss: 0.3739 - accuracy: 0.9964
- val_loss: 0.4179 - val_accuracy: 0.9810

Epoch 27/100
70/70 [=====] - 149s 2s/step - loss: 0.3943 - accuracy: 0.9964
- val_loss: 0.4552 - val_accuracy: 0.9620

Epoch 28/100
70/70 [=====] - 152s 2s/step - loss: 0.3449 - accuracy: 1.0000
- val_loss: 0.3736 - val_accuracy: 0.9810

Epoch 29/100
70/70 [=====] - 147s 2s/step - loss: 0.4735 - accuracy: 0.9786
- val_loss: 1.0784 - val_accuracy: 0.4937

Epoch 30/100
70/70 [=====] - 148s 2s/step - loss: 0.6083 - accuracy: 0.9804
- val_loss: 0.7490 - val_accuracy: 0.8861

Epoch 31/100
70/70 [=====] - 152s 2s/step - loss: 0.4642 - accuracy: 0.9786
- val_loss: 0.4261 - val_accuracy: 0.9873

Epoch 32/100
70/70 [=====] - 150s 2s/step - loss: 0.4989 - accuracy: 0.9768
- val_loss: 0.4835 - val_accuracy: 0.9873

Epoch 33/100
70/70 [=====] - 153s 2s/step - loss: 0.3946 - accuracy: 0.9893
- val_loss: 0.4126 - val_accuracy: 0.9684

Epoch 34/100
70/70 [=====] - 147s 2s/step - loss: 0.3960 - accuracy: 0.9929
- val_loss: 0.3796 - val_accuracy: 0.9873

Epoch 35/100
70/70 [=====] - 149s 2s/step - loss: 0.4602 - accuracy: 0.9786
- val_loss: 0.5305 - val_accuracy: 0.9494

Epoch 36/100
70/70 [=====] - 153s 2s/step - loss: 0.5219 - accuracy: 0.9875
- val_loss: 1.0523 - val_accuracy: 0.8797

Epoch 37/100
70/70 [=====] - 146s 2s/step - loss: 0.3294 - accuracy: 0.9946
- val_loss: 0.3279 - val_accuracy: 0.9873

Epoch 38/100
70/70 [=====] - 147s 2s/step - loss: 0.3150 - accuracy: 0.9964
- val_loss: 0.5206 - val_accuracy: 0.9430

Epoch 39/100

70/70 [=====] - 151s 2s/step - loss: 0.3123 - accuracy: 1.0000
- val_loss: 0.3908 - val_accuracy: 0.9557
Epoch 40/100
70/70 [=====] - 148s 2s/step - loss: 0.4200 - accuracy: 0.9839
- val_loss: 0.5057 - val_accuracy: 0.9684
Epoch 41/100
70/70 [=====] - 152s 2s/step - loss: 0.3424 - accuracy: 0.9964
- val_loss: 0.3586 - val_accuracy: 0.9810
Epoch 42/100
70/70 [=====] - 147s 2s/step - loss: 0.2991 - accuracy: 1.0000
- val_loss: 0.3728 - val_accuracy: 0.9747
Epoch 43/100
70/70 [=====] - 151s 2s/step - loss: 0.3611 - accuracy: 0.9964
- val_loss: 0.4342 - val_accuracy: 0.9684
Epoch 44/100
70/70 [=====] - 152s 2s/step - loss: 0.3274 - accuracy: 0.9982
- val_loss: 0.4187 - val_accuracy: 0.9620
Epoch 45/100
70/70 [=====] - 147s 2s/step - loss: 0.4073 - accuracy: 0.9964
- val_loss: 0.4987 - val_accuracy: 0.9873
Epoch 46/100
70/70 [=====] - 145s 2s/step - loss: 0.3080 - accuracy: 1.0000
- val_loss: 0.3308 - val_accuracy: 0.9873
Epoch 47/100
70/70 [=====] - 152s 2s/step - loss: 0.2985 - accuracy: 1.0000
- val_loss: 0.3651 - val_accuracy: 0.9873
Epoch 48/100
70/70 [=====] - 150s 2s/step - loss: 0.3300 - accuracy: 0.9982
- val_loss: 0.5873 - val_accuracy: 0.9557
Epoch 49/100
70/70 [=====] - 147s 2s/step - loss: 0.3662 - accuracy: 0.9982
- val_loss: 0.6464 - val_accuracy: 0.9114
Epoch 50/100
70/70 [=====] - 147s 2s/step - loss: 0.3347 - accuracy: 0.9982
- val_loss: 0.3851 - val_accuracy: 0.9747
Epoch 51/100
70/70 [=====] - 150s 2s/step - loss: 0.5962 - accuracy: 0.9911
- val_loss: 1.7686 - val_accuracy: 0.8671
Epoch 52/100
70/70 [=====] - 149s 2s/step - loss: 0.4042 - accuracy: 0.9929
- val_loss: 0.5389 - val_accuracy: 0.9241
Epoch 53/100
70/70 [=====] - 146s 2s/step - loss: 0.2434 - accuracy: 0.9982
- val_loss: 0.4718 - val_accuracy: 0.9304

Epoch 54/100
70/70 [=====] - 145s 2s/step - loss: 0.2574 - accuracy: 0.9982
- val_loss: 0.3116 - val_accuracy: 0.9873

Epoch 55/100
70/70 [=====] - 150s 2s/step - loss: 0.2659 - accuracy: 1.0000
- val_loss: 0.3570 - val_accuracy: 0.9684

Epoch 56/100
70/70 [=====] - 146s 2s/step - loss: 0.5995 - accuracy: 0.9804
- val_loss: 0.7999 - val_accuracy: 0.9873

Epoch 57/100
70/70 [=====] - 147s 2s/step - loss: 0.5583 - accuracy: 0.9786
- val_loss: 0.3201 - val_accuracy: 0.9937

Epoch 58/100
70/70 [=====] - 151s 2s/step - loss: 0.2529 - accuracy: 0.9982
- val_loss: 0.2341 - val_accuracy: 0.9937

Epoch 59/100
70/70 [=====] - 152s 2s/step - loss: 0.2199 - accuracy: 1.0000
- val_loss: 0.2531 - val_accuracy: 0.9810

Epoch 60/100
70/70 [=====] - 150s 2s/step - loss: 0.3002 - accuracy: 0.9946
- val_loss: 0.4798 - val_accuracy: 0.9873

Epoch 61/100
70/70 [=====] - 145s 2s/step - loss: 0.3092 - accuracy: 0.9964
- val_loss: 0.5018 - val_accuracy: 0.9367

Epoch 62/100
70/70 [=====] - 147s 2s/step - loss: 0.2562 - accuracy: 0.9964
- val_loss: 0.3131 - val_accuracy: 0.9684

Epoch 63/100
70/70 [=====] - 151s 2s/step - loss: 0.2913 - accuracy: 0.9982
- val_loss: 0.3452 - val_accuracy: 0.9684

Epoch 64/100
70/70 [=====] - 148s 2s/step - loss: 0.2442 - accuracy: 1.0000
- val_loss: 0.3077 - val_accuracy: 0.9684

Epoch 65/100
70/70 [=====] - 150s 2s/step - loss: 0.2710 - accuracy: 0.9982
- val_loss: 0.5526 - val_accuracy: 1.0000

Epoch 66/100
70/70 [=====] - 153s 2s/step - loss: 0.4595 - accuracy: 0.9857
- val_loss: 0.3776 - val_accuracy: 0.9937

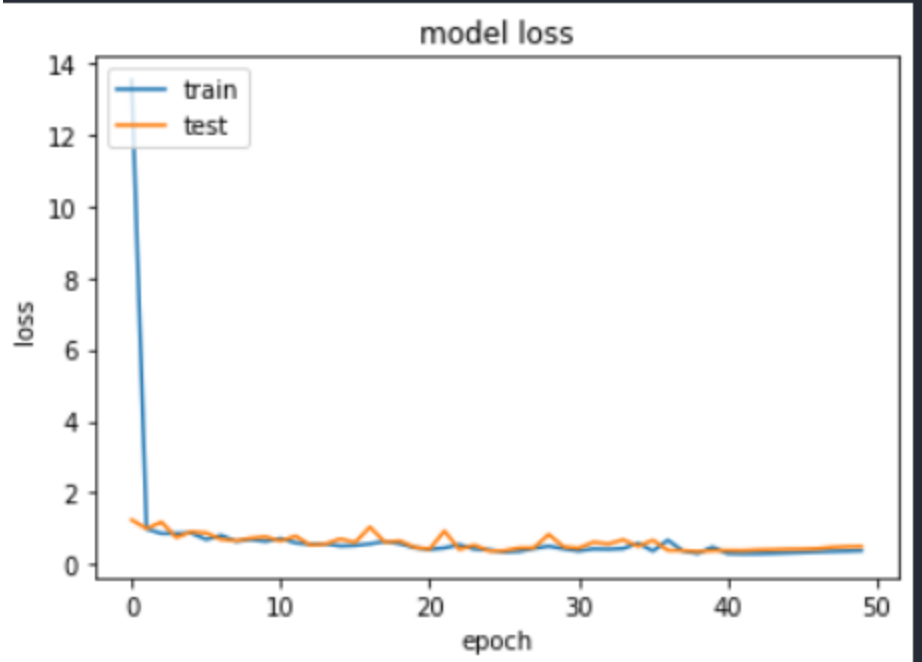
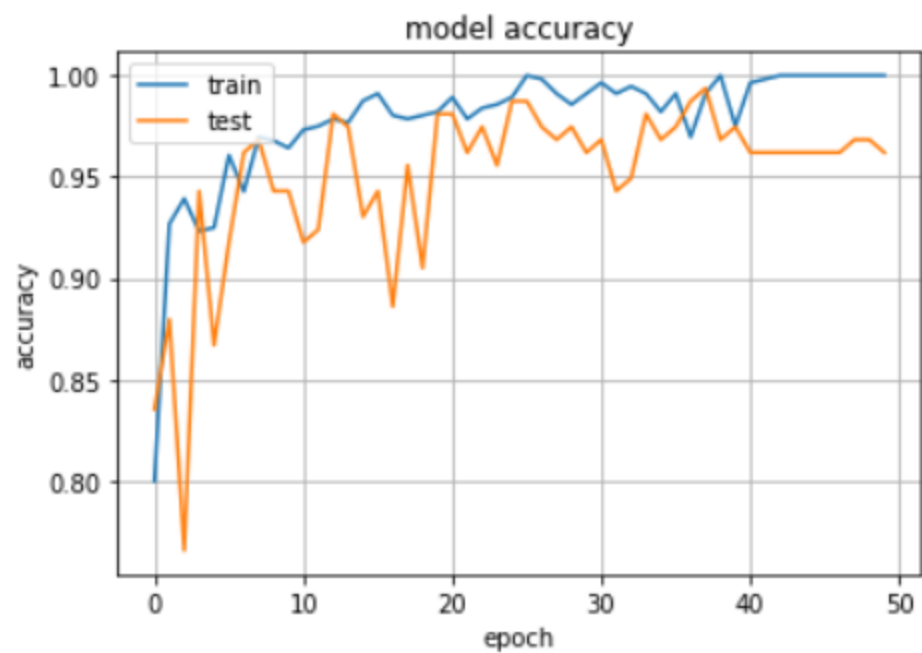
Epoch 67/100
70/70 [=====] - 152s 2s/step - loss: 0.3632 - accuracy: 0.9929
- val_loss: 0.4192 - val_accuracy: 0.9810

Epoch 68/100

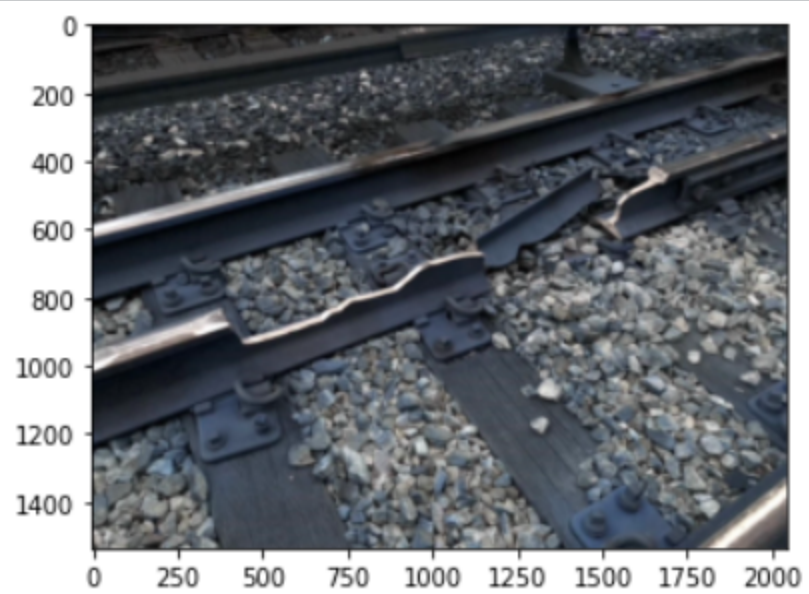
70/70 [=====] - 150s 2s/step - loss: 0.4158 - accuracy: 0.9875
- val_loss: 0.4676 - val_accuracy: 0.9873
Epoch 69/100
70/70 [=====] - 149s 2s/step - loss: 0.2966 - accuracy: 0.9964
- val_loss: 0.3106 - val_accuracy: 0.9747
Epoch 70/100
70/70 [=====] - 146s 2s/step - loss: 0.3828 - accuracy: 0.9911
- val_loss: 0.4043 - val_accuracy: 0.9873
Epoch 71/100
70/70 [=====] - 151s 2s/step - loss: 0.2658 - accuracy: 1.0000
- val_loss: 0.2948 - val_accuracy: 0.9810
Epoch 72/100
70/70 [=====] - 150s 2s/step - loss: 0.3760 - accuracy: 0.9893
- val_loss: 0.8076 - val_accuracy: 0.8797
Epoch 73/100
70/70 [=====] - 151s 2s/step - loss: 0.3281 - accuracy: 0.9982
- val_loss: 0.3337 - val_accuracy: 0.9747
Epoch 74/100
70/70 [=====] - 150s 2s/step - loss: 0.3959 - accuracy: 0.9946
- val_loss: 0.6958 - val_accuracy: 0.9937
Epoch 75/100
70/70 [=====] - 152s 2s/step - loss: 0.3396 - accuracy: 0.9982
- val_loss: 0.3466 - val_accuracy: 0.9684
Epoch 76/100
70/70 [=====] - 151s 2s/step - loss: 0.2929 - accuracy: 0.9964
- val_loss: 0.6717 - val_accuracy: 0.9684
Epoch 77/100
70/70 [=====] - 146s 2s/step - loss: 0.4599 - accuracy: 0.9929
- val_loss: 0.3550 - val_accuracy: 0.9810
Epoch 78/100
70/70 [=====] - 144s 2s/step - loss: 0.2646 - accuracy: 1.0000
- val_loss: 0.3160 - val_accuracy: 0.9810
Epoch 79/100
70/70 [=====] - 151s 2s/step - loss: 0.2674 - accuracy: 1.0000
- val_loss: 0.3327 - val_accuracy: 0.9810
Epoch 80/100
70/70 [=====] - 146s 2s/step - loss: 0.5154 - accuracy: 0.9821
- val_loss: 0.7575 - val_accuracy: 0.9620
Epoch 81/100
70/70 [=====] - 150s 2s/step - loss: 0.2880 - accuracy: 1.0000
- val_loss: 0.3822 - val_accuracy: 0.9620
Epoch 82/100
70/70 [=====] - 149s 2s/step - loss: 0.2683 - accuracy: 0.9982
- val_loss: 0.3013 - val_accuracy: 0.9810

Epoch 83/100
70/70 [=====] - 146s 2s/step - loss: 0.2505 - accuracy: 0.9982
- val_loss: 0.4453 - val_accuracy: 0.9557
Epoch 84/100
70/70 [=====] - 148s 2s/step - loss: 0.3180 - accuracy: 0.9946
- val_loss: 0.3502 - val_accuracy: 0.9810
Epoch 85/100
70/70 [=====] - 150s 2s/step - loss: 0.2456 - accuracy: 1.0000
- val_loss: 0.3133 - val_accuracy: 0.9747
Epoch 86/100
70/70 [=====] - 149s 2s/step - loss: 0.2493 - accuracy: 1.0000
- val_loss: 0.3147 - val_accuracy: 0.9873
Epoch 87/100
70/70 [=====] - 152s 2s/step - loss: 0.2596 - accuracy: 1.0000
- val_loss: 0.2756 - val_accuracy: 0.9937
Epoch 88/100
70/70 [=====] - 147s 2s/step - loss: 0.3245 - accuracy: 0.9982
- val_loss: 0.4478 - val_accuracy: 0.9620
Epoch 89/100
70/70 [=====] - 149s 2s/step - loss: 0.2738 - accuracy: 1.0000
- val_loss: 0.3959 - val_accuracy: 0.9684
Epoch 90/100
70/70 [=====] - 150s 2s/step - loss: 0.4990 - accuracy: 0.9804
- val_loss: 1.1441 - val_accuracy: 0.9051
Epoch 91/100
70/70 [=====] - 145s 2s/step - loss: 0.2781 - accuracy: 1.0000
- val_loss: 0.3319 - val_accuracy: 0.9810
Epoch 92/100
70/70 [=====] - 146s 2s/step - loss: 0.2854 - accuracy: 0.9946
- val_loss: 0.3592 - val_accuracy: 1.0000
Epoch 93/100
70/70 [=====] - 150s 2s/step - loss: 0.2765 - accuracy: 1.0000
- val_loss: 0.2580 - val_accuracy: 1.0000
Epoch 94/100
70/70 [=====] - 146s 2s/step - loss: 0.2643 - accuracy: 1.0000
- val_loss: 0.2691 - val_accuracy: 1.0000
Epoch 95/100
70/70 [=====] - 151s 2s/step - loss: 0.5670 - accuracy: 0.9786
- val_loss: 0.4479 - val_accuracy: 1.0000
Epoch 96/100
70/70 [=====] - 150s 2s/step - loss: 0.3276 - accuracy: 0.9946
- val_loss: 0.2756 - val_accuracy: 0.9937
Epoch 97/100

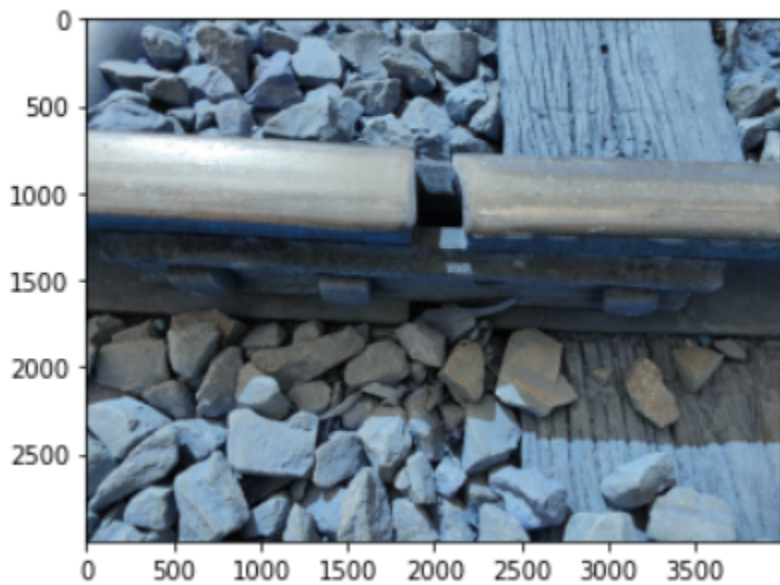
70/70 [=====] - 151s 2s/step - loss: 0.3451 - accuracy: 0.9893
- val_loss: 0.3748 - val_accuracy: 0.9747
Epoch 98/100
70/70 [=====] - 152s 2s/step - loss: 0.3002 - accuracy: 0.9929
- val_loss: 0.2707 - val_accuracy: 0.9747
Epoch 99/100
70/70 [=====] - 144s 2s/step - loss: 0.3617 - accuracy: 0.9875
- val_loss: 0.3072 - val_accuracy: 1.0000
Epoch 100/100
70/70 [=====] - 145s 2s/step - loss: 0.2325 - accuracy: 1.0000
- val_loss: 0.2349 - val_accuracy: 0.993



```
[[0.01137462]]  
This Railway track has fault
```



```
[[0.01140054]]  
This Railway track has fault
```



Training -2 - dataset - sleepers

Epoch 1/100

2021-11-04 19:52:52.812101: I tensorflow/stream_executor/cuda/cuda_dnn.cc:369] Loaded cuDNN version 8005

123/123 [=====] - 407s 3s/step - loss: 8.7080 - accuracy: 0.7459 - val_loss: 1.1987 - val_accuracy: 0.8321

Epoch 2/100

123/123 [=====] - 320s 3s/step - loss: 1.0961 - accuracy: 0.8378 - val_loss: 1.1641 - val_accuracy: 0.7250

Epoch 3/100

123/123 [=====] - 310s 3s/step - loss: 0.9614 - accuracy: 0.8786 - val_loss: 1.2695 - val_accuracy: 0.7000

Epoch 4/100

123/123 [=====] - 310s 3s/step - loss: 0.9444 - accuracy: 0.8755 - val_loss: 0.9822 - val_accuracy: 0.8821

Epoch 5/100

123/123 [=====] - 303s 2s/step - loss: 0.7902 - accuracy: 0.9347 - val_loss: 0.8529 - val_accuracy: 0.9143

Epoch 6/100

123/123 [=====] - 308s 3s/step - loss: 0.7359 - accuracy: 0.9459 - val_loss: 0.7810 - val_accuracy: 0.9429

Epoch 7/100

123/123 [=====] - 316s 3s/step - loss: 0.7405 - accuracy: 0.9418 - val_loss: 1.2803 - val_accuracy: 0.7250

Epoch 8/100

123/123 [=====] - 322s 3s/step - loss: 0.7380 - accuracy: 0.9480 - val_loss: 0.8581 - val_accuracy: 0.9000

Epoch 9/100

123/123 [=====] - 303s 2s/step - loss: 0.6646 - accuracy: 0.9500 - val_loss: 0.6654 - val_accuracy: 0.9357

Epoch 10/100

123/123 [=====] - 315s 3s/step - loss: 0.6054 - accuracy: 0.9745 - val_loss: 0.7352 - val_accuracy: 0.9464

Epoch 11/100

123/123 [=====] - 306s 2s/step - loss: 0.6295 - accuracy: 0.9673 - val_loss: 0.5828 - val_accuracy: 0.9679

Epoch 12/100

123/123 [=====] - 317s 3s/step - loss: 0.6314 - accuracy: 0.9745 - val_loss: 0.6852 - val_accuracy: 0.9214

Epoch 13/100

123/123 [=====] - 307s 2s/step - loss: 0.5464 - accuracy: 0.9776 - val_loss: 0.6413 - val_accuracy: 0.9571

Epoch 14/100

123/123 [=====] - 307s 2s/step - loss: 0.5703 - accuracy: 0.9714 - val_loss: 0.5656 - val_accuracy: 0.9571

Epoch 15/100

123/123 [=====] - 304s 2s/step - loss: 0.4686 - accuracy: 0.9969 - val_loss: 0.5361 - val_accuracy: 0.9714

Epoch 16/100

123/123 [=====] - 312s 3s/step - loss: 0.5476 - accuracy: 0.9878 - val_loss: 0.6855 - val_accuracy: 0.9429

Epoch 17/100

123/123 [=====] - 303s 2s/step - loss: 0.6303 - accuracy: 0.9684 - val_loss: 0.6023 - val_accuracy: 0.9357

Epoch 18/100

123/123 [=====] - 321s 3s/step - loss: 0.4852 - accuracy: 0.9827 - val_loss: 0.6461 - val_accuracy: 0.9429

Epoch 19/100

123/123 [=====] - 315s 3s/step - loss: 0.4904 - accuracy: 0.9908 - val_loss: 0.5692 - val_accuracy: 0.9571

Epoch 20/100

123/123 [=====] - 310s 3s/step - loss: 0.5077 - accuracy: 0.9878 - val_loss: 0.5783 - val_accuracy: 0.9536

Epoch 21/100

123/123 [=====] - 305s 2s/step - loss: 0.4739 - accuracy: 0.9939 - val_loss: 0.5395 - val_accuracy: 0.9714

Epoch 22/100

123/123 [=====] - 309s 3s/step - loss: 0.5193 - accuracy: 0.9837 - val_loss: 0.5417 - val_accuracy: 0.9750

Epoch 23/100

123/123 [=====] - 302s 2s/step - loss: 0.4640 - accuracy: 0.9949 - val_loss: 0.5433 - val_accuracy: 0.9643

Epoch 24/100

123/123 [=====] - 299s 2s/step - loss: 0.5253 - accuracy: 0.9908 - val_loss: 0.7189 - val_accuracy: 0.9429

Epoch 25/100

123/123 [=====] - 307s 2s/step - loss: 0.4856 - accuracy: 0.9867 - val_loss: 0.7229 - val_accuracy: 0.9321

Epoch 26/100

123/123 [=====] - 311s 3s/step - loss: 0.5422 - accuracy: 0.9786 - val_loss: 0.6126 - val_accuracy: 0.9500

Epoch 27/100

123/123 [=====] - 315s 3s/step - loss: 0.5776 - accuracy: 0.9806 - val_loss: 0.5251 - val_accuracy: 0.9607

Epoch 28/100

123/123 [=====] - 315s 3s/step - loss: 0.4122 - accuracy: 0.9939 - val_loss: 0.5058 - val_accuracy: 0.9643

Epoch 29/100

123/123 [=====] - 316s 3s/step - loss: 0.3903 - accuracy: 0.9990 - val_loss: 0.5566 - val_accuracy: 0.9500
Epoch 30/100
123/123 [=====] - 303s 2s/step - loss: 0.4664 - accuracy: 0.9908 - val_loss: 0.6070 - val_accuracy: 0.9464
Epoch 31/100
123/123 [=====] - 314s 3s/step - loss: 0.4878 - accuracy: 0.9918 - val_loss: 0.5183 - val_accuracy: 0.9679
Epoch 32/100
123/123 [=====] - 315s 3s/step - loss: 0.4638 - accuracy: 0.9959 - val_loss: 0.7077 - val_accuracy: 0.9571
Epoch 33/100
123/123 [=====] - 299s 2s/step - loss: 0.5458 - accuracy: 0.9878 - val_loss: 0.5331 - val_accuracy: 0.9393
Epoch 34/100
123/123 [=====] - 310s 3s/step - loss: 0.4224 - accuracy: 0.9918 - val_loss: 0.5106 - val_accuracy: 0.9714
Epoch 35/100
123/123 [=====] - 311s 3s/step - loss: 0.4606 - accuracy: 0.9929 - val_loss: 0.5558 - val_accuracy: 0.9607
Epoch 36/100
123/123 [=====] - 304s 2s/step - loss: 0.4590 - accuracy: 0.9929 - val_loss: 0.5364 - val_accuracy: 0.9786
Epoch 37/100
123/123 [=====] - 311s 3s/step - loss: 0.5174 - accuracy: 0.9918 - val_loss: 0.6368 - val_accuracy: 0.9893
Epoch 38/100
123/123 [=====] - 303s 2s/step - loss: 0.5440 - accuracy: 0.9888 - val_loss: 0.6479 - val_accuracy: 0.9750
Epoch 39/100
123/123 [=====] - 312s 3s/step - loss: 0.4824 - accuracy: 0.9959 - val_loss: 0.4951 - val_accuracy: 0.9929
Epoch 40/100
123/123 [=====] - 317s 3s/step - loss: 0.4888 - accuracy: 0.9980 - val_loss: 0.5405 - val_accuracy: 0.9643
Epoch 41/100
123/123 [=====] - 304s 2s/step - loss: 0.4887 - accuracy: 0.9939 - val_loss: 0.7406 - val_accuracy: 0.9536
Epoch 42/100
123/123 [=====] - 311s 3s/step - loss: 0.4603 - accuracy: 0.9929 - val_loss: 0.4960 - val_accuracy: 0.9750
Epoch 43/100
123/123 [=====] - 310s 3s/step - loss: 0.5073 - accuracy: 0.9867 - val_loss: 0.6098 - val_accuracy: 0.9500

Epoch 44/100

123/123 [=====] - 307s 2s/step - loss: 0.4884 - accuracy: 0.9929 - val_loss: 0.4808 - val_accuracy: 0.9857

Epoch 45/100

123/123 [=====] - 306s 2s/step - loss: 0.4595 - accuracy: 0.9969 - val_loss: 0.4999 - val_accuracy: 0.9786

Epoch 46/100

123/123 [=====] - 300s 2s/step - loss: 0.4507 - accuracy: 0.9959 - val_loss: 0.5827 - val_accuracy: 0.9536

Epoch 47/100

123/123 [=====] - 308s 3s/step - loss: 0.4783 - accuracy: 0.9918 - val_loss: 0.5421 - val_accuracy: 0.9786

Epoch 48/100

123/123 [=====] - 310s 3s/step - loss: 0.5578 - accuracy: 0.9827 - val_loss: 0.6020 - val_accuracy: 0.9679

Epoch 49/100

123/123 [=====] - 310s 3s/step - loss: 0.4419 - accuracy: 0.9980 - val_loss: 0.5683 - val_accuracy: 0.9679

Epoch 50/100

123/123 [=====] - 307s 2s/step - loss: 0.4558 - accuracy: 0.9980 - val_loss: 0.5388 - val_accuracy: 0.9786

Epoch 51/100

123/123 [=====] - 317s 3s/step - loss: 0.4879 - accuracy: 0.9980 - val_loss: 0.5961 - val_accuracy: 0.9679

Epoch 52/100

123/123 [=====] - 321s 3s/step - loss: 0.4962 - accuracy: 1.0000 - val_loss: 0.5840 - val_accuracy: 0.9821

Epoch 53/100

123/123 [=====] - 312s 3s/step - loss: 0.5307 - accuracy: 1.0000 - val_loss: 0.6080 - val_accuracy: 0.9857

Epoch 54/100

123/123 [=====] - 318s 3s/step - loss: 0.5684 - accuracy: 0.9990 - val_loss: 0.6248 - val_accuracy: 0.9786

Epoch 55/100

123/123 [=====] - 308s 3s/step - loss: 0.5743 - accuracy: 0.9990 - val_loss: 0.9326 - val_accuracy: 0.9393

Epoch 56/100

123/123 [=====] - 304s 2s/step - loss: 0.6148 - accuracy: 0.9908 - val_loss: 0.6788 - val_accuracy: 0.9607

Epoch 57/100

123/123 [=====] - 303s 2s/step - loss: 0.5405 - accuracy: 0.9908 - val_loss: 0.5058 - val_accuracy: 0.9679

Epoch 58/100

123/123 [=====] - 308s 3s/step - loss: 0.5745 - accuracy: 0.9857 - val_loss: 0.5538 - val_accuracy: 0.9679
Epoch 59/100
123/123 [=====] - 308s 3s/step - loss: 0.3804 - accuracy: 0.9949 - val_loss: 0.4307 - val_accuracy: 0.9714
Epoch 60/100
123/123 [=====] - 315s 3s/step - loss: 0.4156 - accuracy: 0.9929 - val_loss: 0.4998 - val_accuracy: 0.9714
Epoch 61/100
123/123 [=====] - 312s 3s/step - loss: 0.3863 - accuracy: 0.9990 - val_loss: 0.5179 - val_accuracy: 0.9714
Epoch 62/100
123/123 [=====] - 304s 2s/step - loss: 0.4341 - accuracy: 0.9990 - val_loss: 0.6798 - val_accuracy: 0.9679
Epoch 63/100
123/123 [=====] - 314s 3s/step - loss: 0.4538 - accuracy: 0.9949 - val_loss: 0.6099 - val_accuracy: 0.9643
Epoch 64/100
123/123 [=====] - 310s 3s/step - loss: 0.4392 - accuracy: 0.9990 - val_loss: 0.5875 - val_accuracy: 0.9571
Epoch 65/100
123/123 [=====] - 305s 2s/step - loss: 0.4803 - accuracy: 0.9959 - val_loss: 0.6106 - val_accuracy: 0.9679
Epoch 66/100
123/123 [=====] - 309s 3s/step - loss: 0.5002 - accuracy: 0.9980 - val_loss: 0.6034 - val_accuracy: 0.9714
Epoch 67/100
123/123 [=====] - 319s 3s/step - loss: 0.4827 - accuracy: 0.9990 - val_loss: 0.5971 - val_accuracy: 0.9714
Epoch 68/100
123/123 [=====] - 302s 2s/step - loss: 0.5529 - accuracy: 0.9939 - val_loss: 0.7956 - val_accuracy: 0.9464
Epoch 69/100
123/123 [=====] - 317s 3s/step - loss: 0.6634 - accuracy: 0.9816 - val_loss: 0.9909 - val_accuracy: 0.9036
Epoch 70/100
123/123 [=====] - 307s 2s/step - loss: 0.4561 - accuracy: 0.9959 - val_loss: 0.4844 - val_accuracy: 0.9607
Epoch 71/100
123/123 [=====] - 299s 2s/step - loss: 0.4170 - accuracy: 0.9949 - val_loss: 0.6053 - val_accuracy: 0.9643
Epoch 72/100
123/123 [=====] - 318s 3s/step - loss: 0.4437 - accuracy: 0.9959 - val_loss: 0.5725 - val_accuracy: 0.9536

Epoch 73/100

123/123 [=====] - 319s 3s/step - loss: 0.4765 - accuracy: 0.9949 - val_loss: 0.5626 - val_accuracy: 0.9679

Epoch 74/100

123/123 [=====] - 307s 2s/step - loss: 0.4870 - accuracy: 0.9959 - val_loss: 0.5956 - val_accuracy: 0.9714

Epoch 75/100

123/123 [=====] - 314s 3s/step - loss: 0.4766 - accuracy: 0.9980 - val_loss: 0.5902 - val_accuracy: 0.9643

Epoch 76/100

123/123 [=====] - 304s 2s/step - loss: 0.4667 - accuracy: 0.9990 - val_loss: 0.5905 - val_accuracy: 0.9679

Epoch 77/100

123/123 [=====] - 309s 3s/step - loss: 0.4916 - accuracy: 1.0000 - val_loss: 0.6211 - val_accuracy: 0.9714

Epoch 78/100

123/123 [=====] - 318s 3s/step - loss: 0.5616 - accuracy: 0.9949 - val_loss: 0.6668 - val_accuracy: 0.9607

Epoch 79/100

123/123 [=====] - 306s 2s/step - loss: 0.5363 - accuracy: 0.9918 - val_loss: 0.6677 - val_accuracy: 0.9393

Epoch 80/100

123/123 [=====] - 317s 3s/step - loss: 0.4528 - accuracy: 0.9959 - val_loss: 0.6301 - val_accuracy: 0.9500

Epoch 81/100

123/123 [=====] - 316s 3s/step - loss: 0.4695 - accuracy: 0.9980 - val_loss: 0.5755 - val_accuracy: 0.9750

Epoch 82/100

123/123 [=====] - 314s 3s/step - loss: 0.6137 - accuracy: 0.9847 - val_loss: 0.6204 - val_accuracy: 0.9786

Epoch 83/100

123/123 [=====] - 307s 2s/step - loss: 0.4467 - accuracy: 0.9959 - val_loss: 0.5133 - val_accuracy: 0.9607

Epoch 84/100

123/123 [=====] - 305s 2s/step - loss: 0.4236 - accuracy: 0.9969 - val_loss: 0.5054 - val_accuracy: 0.9714

Epoch 85/100

123/123 [=====] - 314s 3s/step - loss: 0.4455 - accuracy: 1.0000 - val_loss: 0.5351 - val_accuracy: 0.9714

Epoch 86/100

123/123 [=====] - 312s 3s/step - loss: 0.5014 - accuracy: 0.9959 - val_loss: 0.5469 - val_accuracy: 0.9679

Epoch 87/100

123/123 [=====] - 310s 3s/step - loss: 0.5179 - accuracy: 0.9949 - val_loss: 0.7460 - val_accuracy: 0.9500
Epoch 88/100
123/123 [=====] - 308s 3s/step - loss: 0.4792 - accuracy: 1.0000 - val_loss: 0.5806 - val_accuracy: 0.9714
Epoch 89/100
123/123 [=====] - 306s 2s/step - loss: 0.5148 - accuracy: 1.0000 - val_loss: 0.6095 - val_accuracy: 0.9750
Epoch 90/100
123/123 [=====] - 312s 3s/step - loss: 0.5472 - accuracy: 1.0000 - val_loss: 0.6373 - val_accuracy: 0.9750
Epoch 91/100
123/123 [=====] - 306s 2s/step - loss: 0.6320 - accuracy: 0.9888 - val_loss: 0.8211 - val_accuracy: 0.9500
Epoch 92/100
123/123 [=====] - 309s 3s/step - loss: 0.4608 - accuracy: 0.9939 - val_loss: 0.6512 - val_accuracy: 0.9607
Epoch 93/100
123/123 [=====] - 314s 3s/step - loss: 0.4177 - accuracy: 0.9990 - val_loss: 0.6656 - val_accuracy: 0.9250
Epoch 94/100
123/123 [=====] - 311s 3s/step - loss: 0.4632 - accuracy: 0.9949 - val_loss: 0.5236 - val_accuracy: 0.9607
Epoch 95/100
123/123 [=====] - 307s 3s/step - loss: 0.4082 - accuracy: 0.9990 - val_loss: 0.5760 - val_accuracy: 0.9536
Epoch 96/100
123/123 [=====] - 315s 3s/step - loss: 0.4426 - accuracy: 0.9990 - val_loss: 0.5602 - val_accuracy: 0.9643
Epoch 97/100
123/123 [=====] - 316s 3s/step - loss: 0.4681 - accuracy: 0.9990 - val_loss: 0.6100 - val_accuracy: 0.9571
Epoch 98/100
123/123 [=====] - 313s 3s/step - loss: 0.4885 - accuracy: 1.0000 - val_loss: 0.6507 - val_accuracy: 0.9571
Epoch 99/100
123/123 [=====] - 321s 3s/step - loss: 0.5198 - accuracy: 1.0000 - val_loss: 0.6684 - val_accuracy: 0.9643
Epoch 100/100
123/123 [=====] - 310s 3s/step - loss: 0.5392 - accuracy: 1.0000 - val_loss: 0.7186 - val_accuracy: 0.9643