

05\_05\_7:15:31PM

Incredibly accurate for some reason. Even though it's only using two epochs.

- Headless “feature\_extractor\_model”
- classifier\_model = “https://tfhub.dev/google/tf2-preview/mobilenet\_v2/classification/4”
- From this tutorial [https://github.com/tensorflow/docs/blob/master/site/en/tutorials/images/transfer\\_learning\\_with\\_hub.ipynb](https://github.com/tensorflow/docs/blob/master/site/en/tutorials/images/transfer_learning_with_hub.ipynb)

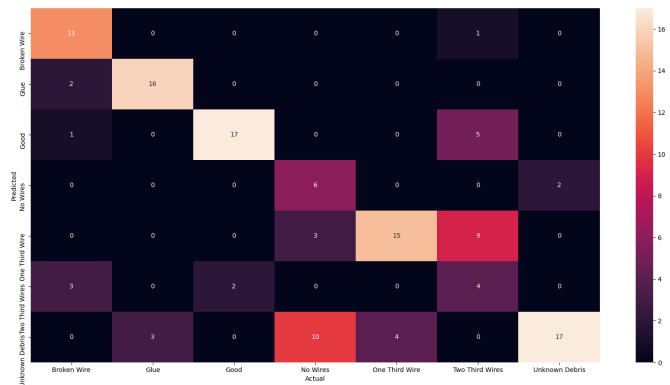
```
batch_size = 32
img_height = 224
img_width = 224
```

[https://github.com/tensorflow/docs/blob/master/site/en/tutorials/images/transfer\\_learning\\_with\\_hub.ipynb](https://github.com/tensorflow/docs/blob/master/site/en/tutorials/images/transfer_learning_with_hub.ipynb)

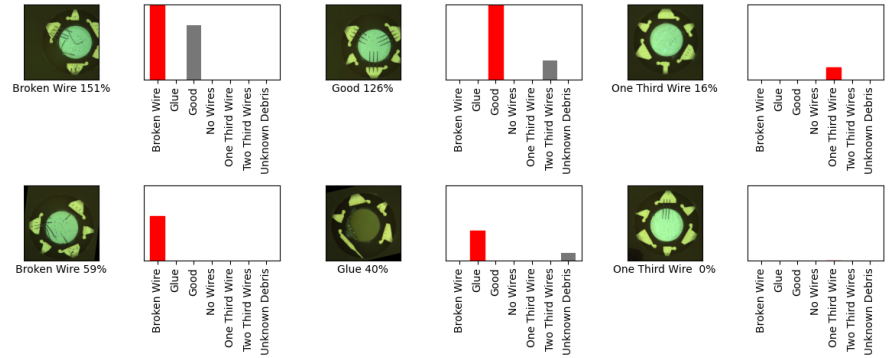
### Model Summary Model: "sequential\_1"

Layer (type)	Output Shape	Param #
keras_layer_1 (KerasLayer)	(None, 1280)	2257984
dense (Dense)	(None, 7)	8967

Total params: 2,266,951 Trainable params: 2,232,839 Non-trainable  
params: 34,112



### Confusion Matrix



### Random Samples

### Dataframe predictions “ predicted actual confidence path 0 One Third

Wire One Third Wire -0.302736 one\_thirds\_wires/augmented\_image\_3.jpg 1

Unknown Debris One Third Wire 0.465405 one\_thirds\_wires/augmented\_image\_2.jpg

2 One Third Wire One Third Wire -0.302736 one\_thirds\_wires/augmented\_image\_1.jpg

3 Unknown Debris One Third Wire 0.399917 one\_thirds\_wires/augmented\_image\_5.jpg

4 One Third Wire One Third Wire 0.150800 one\_thirds\_wires/augmented\_image\_4.jpg

.. ... 128 Two Third Wires Two Third Wires 1.885084 two\_thirds\_wire/augmented\_image\_12.jpg

129 Two Third Wires Two Third Wires -0.481660 two\_thirds\_wire/augmented\_image\_16.jpg

130 One Third Wire Two Third Wires 1.598302 two\_thirds\_wire/augmented\_image\_17.jpg

131 One Third Wire Two Third Wires 0.420499 two\_thirds\_wire/augmented\_image\_15.jpg

132 One Third Wire Two Third Wires 0.841929 two\_thirds\_wire/augmented\_image\_14.jpg

[133 rows x 4 columns] “