ML Testing of Image

November 26, 2019

[2]:
```
model = load_model('model.h5')
```

```
WARNING:tensorflow:From /home/rahetul/.local/lib/python3.6/site-
packages/tensorflow/python/ops/init_ops.py:1251: calling
VarianceScaling.__init__ (from tensorflow.python.ops.init_ops) with dtype is
deprecated and will be removed in a future version.
Instructions for updating:
Call initializer instance with the dtype argument instead of passing it to the
constructor
```

[3]:
```
img = cv2.imread('2019-11-26-055106.jpg')
```

[17]:
```
i3= cv2.imread('IMG_0124-01.jpeg')
```

[18]:
```
size = (150,150)
i3= cv2.resize(i3, size)
```

[4]:
```
size = (150,150)
img = cv2.resize(img, size)
```

[5]:
```
img = np.array(img, dtype = 'float32')
```

[19]:
```
i3=np.array(i3, dtype = 'float32')
```

[20]:
```
i33 = i3.reshape((-1, 150, 150, 3))
```

[6]:
```
img1 = img.reshape((-1, 150, 150, 3))
```

[ ]:
```
img=img / 255.0
```

[7]:
```
model.summary
```

[7]:
```
<bound method Network.summary of
<tensorflow.python.keras.engine.sequential.Sequential object at 0x7f6f82725e80>>
```

[9]:
```
predictions = model.predict(img1)
```

[21]:
```
predictions3 = model.predict(i33)
```

[ ]:
```
predictions
```

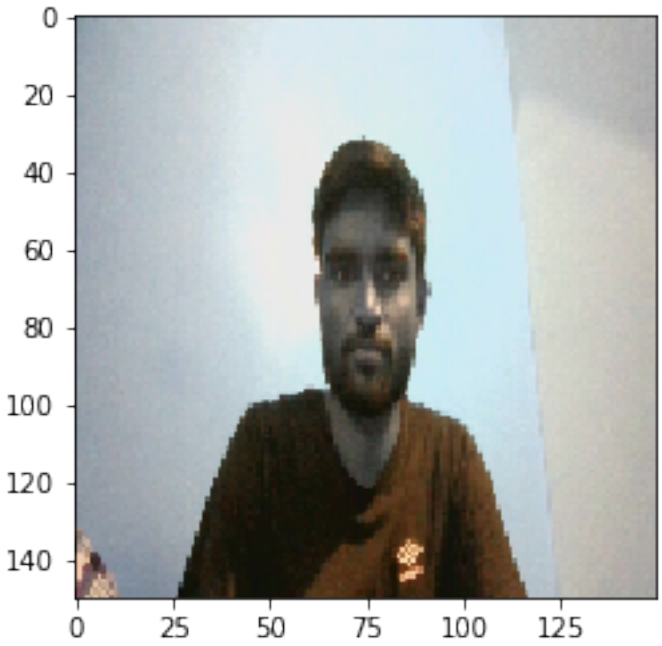
[10]:
```
from keras.preprocessing import image
import matplotlib.pyplot as plt
```

```
Using TensorFlow backend.
```

[10]:
```
<matplotlib.image.AxesImage at 0x7f6f6d1a85c0>
```

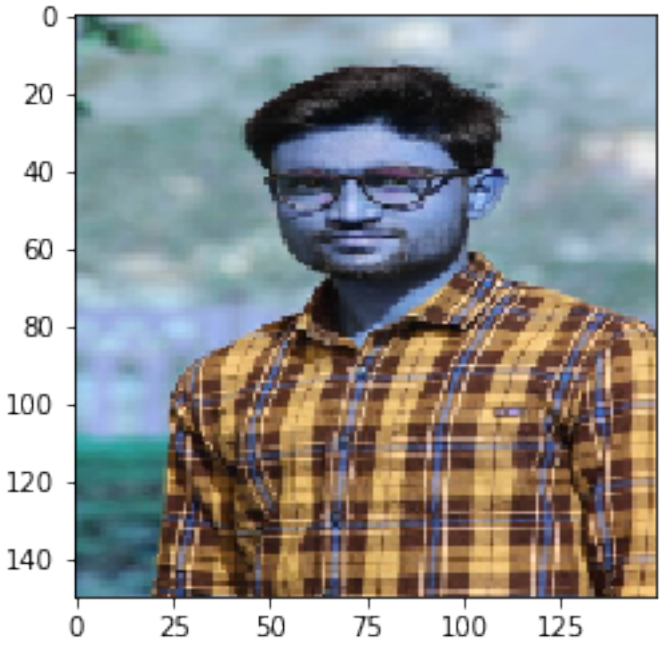
[11]:
```
plt.imshow(img/256.)
```

[11]:
```
<matplotlib.image.AxesImage at 0x7f6f6d13aef0>
```



[22]:
```
plt.imshow(i3/256.)
```

[22]:
```
<matplotlib.image.AxesImage at 0x7f6f6cc437b8>
```



[23]:
```
plt.imshow(predictions3/256.)
```

[23]: <matplotlib.image.AxesImage at 0x7f6f6cbaa390>

[12]:
```
plt.imshow(predictions/256.)
```

[12]: <matplotlib.image.AxesImage at 0x7f6f6cc67cc0>

[13]:
```
img_class=model.predict_classes(img1)
```

[14]:
```
prediction = img_class[0]
```

[15]:
```
classname = img_class[0]
```

[16]:
```
print("Class: ",classname)
```

```
Class:  3
```

[25]:
```
img_class=model.predict_classes(i33)
prediction = img_class[0]
classname = img_class[0]
print("Class: ",classname)
```

```
Class:  3
```

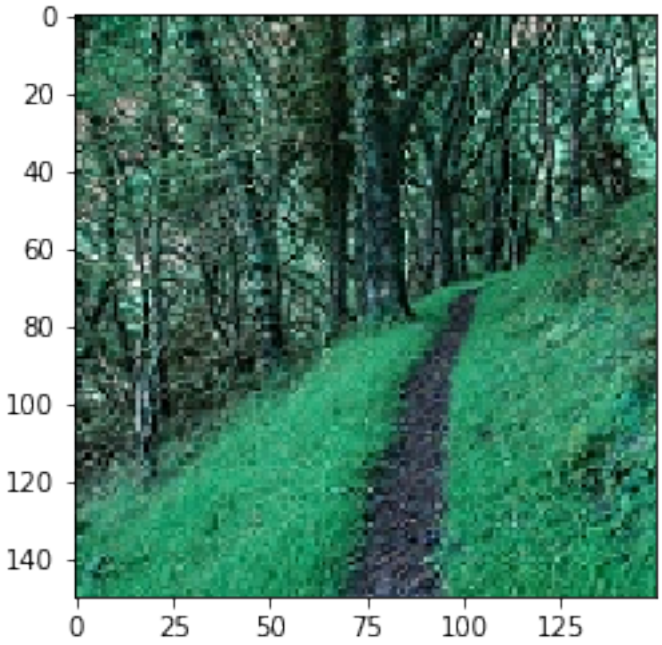
[26]:
```
i4= cv2.imread('466.jpg')
size = (150,150)
i4= cv2.resize(i4, size)
i4=np.array(i4, dtype = 'float32')
```

[27]:
```
i44 = i4.reshape((-1, 150, 150, 3))
```

[28]:
```
predictions4 = model.predict(i44)
```

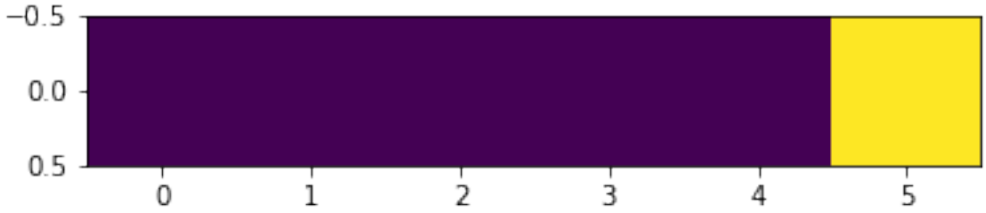
[29]:
```
plt.imshow(i4/256.)
```

[29]:
```
<matplotlib.image.AxesImage at 0x7f6f6cb16390>
```



[30]:
```
plt.imshow(predictions4/256.)
```

[30]: <matplotlib.image.AxesImage at 0x7f6f6ca6df28>



[31]:
```
img_class=model.predict_classes(i44)
prediction = img_class[0]
classname = img_class[0]
print("Class: ",classname)
```

```
Class:  5
```

[ ]: