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In [ ]: # Install the dependancies if not available. Just uncomment
# !pip install Pillow
# !pip install imageio
# !pip install serial
# !pip install tensorflow
# !pip install pyserial
```

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In [ ]: # Import all the Libraries
from PIL import Image
from scipy.misc import imread
import imageio
import serial,time

# Connect to the bluetooth; the port for the bluetooth can be found from the D
# evice manager.
ser = serial.Serial('COM4')
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In [ ]: # Open the image that needs to be converted into the 28x28 format
image = Image.open('try.jpg').convert('L')
image.thumbnail((28, 28), Image.ANTIALIAS)
image.save('resize_1.png')
img = imageio.imread('resize_1.png')
img.shape
```

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In [ ]: # This cell is used to send the data to the bluetooth.
# Data is already embedded in the JSON format for the CC3200.
str_array = []
for i in img:
    for num in i:
        str_array.append(str(num))
index = 0
ser.write(str.encode('{\"state\": {\"desired\" : {\"pythonML\": \"\"}}'))
time.sleep(2)
for i in range(28):
    strTosend = []
    for i in range(28):
        strTosend.append(str(str_array[index]))
        index += 1
    print('x'.join(strTosend))
    strTosend = 'x'.join(strTosend)+'x'
    ser.write(str.encode(strTosend))
    time.sleep(2)
ser.write(str.encode('\"]}}\r\n#'))
print("Done Uploading the Data!")
```

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In [ ]: # Used to close the bluetooth communication.
ser.close()
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