

# parse\_string

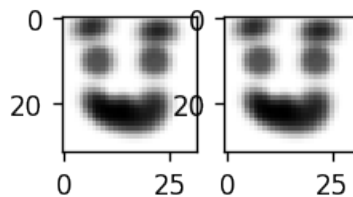
June 14, 2017

```
In [1]: import matplotlib.pyplot as plt
import os
plt.rcParams.update({
    'image.cmap': 'gray',
    'figure.dpi': 120,
    'axes.grid': False,
})
```

```
In [2]: from skimage import data
from skimage.color import rgb2gray

# Load image
img_original = data.imread('image.bmp')
img = rgb2gray(img_original)

fig, axs = plt.subplots(1,2,figsize = (2,2))
axs[0].imshow(img_original)
axs[1].imshow(img)
plt.show()
```



```
In [3]: # Monochromatic images
# img = img[:, :, 1]

# Image print as 2D vector
imgAsVector = ''
imgAsVector += '['
for rows in img:
```

```

        for column in rows:
            imgAsVector += str(column)
            imgAsVector += ','
        imgAsVector = imgAsVector[:-1]
        imgAsVector += ';'
    imgAsVector = imgAsVector[:-1]
    imgAsVector += ']'

    text_file = open("imgin_vector.txt", "w")
    text_file.write("%s" % imgAsVector)
    text_file.close()

```

```

In [4]: try:
        os.remove("imginfnt_vector.txt")
    except OSError:
        pass

    try:
        os.remove("imgout_vector.txt")
    except OSError:
        pass

    import subprocess
    test = subprocess.Popen(["gp", "-q", "fnt_2d_methods.gp"], stdout=subprocess.PIPE)
    output = test.communicate()[0]
    output

```

```

In [5]: with open("imgout_vector.txt") as file:
        data = file.read().replace('\n', '')

```

```

In [6]: import numpy
        newImageArr = numpy.zeros((32,32))
        i=0
        for row in data[1:-1].split(';'):
            newImageArr[i] = row.split(',')
            i += 1

```

```

In [7]: fig, axs = plt.subplots(1,2,figsize = (2,2))
        axs[0].imshow(img_ordinal)
        axs[1].imshow(newImageArr)
        plt.show()

```

