

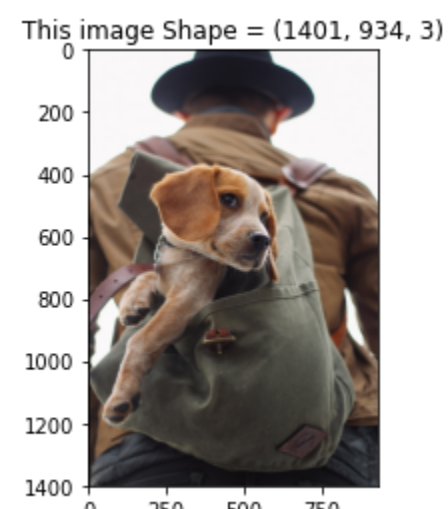
Blending and Pasting Images Part-1

```
In [1]: import numpy as np
import matplotlib.pyplot as plt
import cv2
```

```
In [2]: img_1=cv2.imread('dog_backpack.jpg')
img_2=cv2.imread('watermark_no_copy.png')
img_1=cv2.cvtColor(img_1,cv2.COLOR_BGR2RGB)
img_2=cv2.cvtColor(img_2,cv2.COLOR_BGR2RGB)
```

```
In [3]: plt.title("This image Shape = {img_1.shape}")
plt.imshow(img_1)
```

```
Out[3]: <matplotlib.image.AxesImage at 0x244fbc7f130>
```



```
In [4]: plt.title("This image Shape = {img_2.shape}")
plt.imshow(img_2)
```

```
Out[4]: <matplotlib.image.AxesImage at 0x244fc242d00>
```



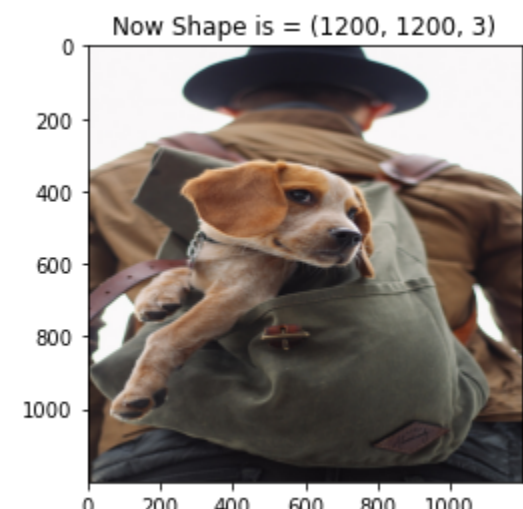
Blending Images of Same Size

```
In [5]: img_1=cv2.resize(img_1,(1200,1200))
```

```
In [6]: img_2=cv2.resize(img_2,(1200,1200))
```

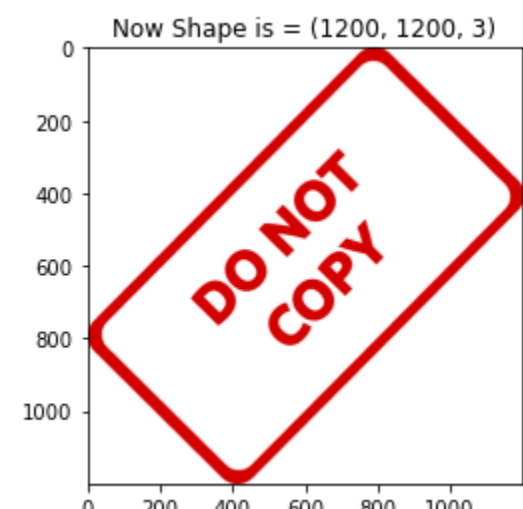
```
In [7]: plt.title("Now Shape is = {img_1.shape}")
plt.imshow(img_1)
```

```
Out[7]: <matplotlib.image.AxesImage at 0x244fc2cc400>
```



```
In [8]: plt.title("Now Shape is = {img_2.shape}")
plt.imshow(img_2)
```

```
Out[8]: <matplotlib.image.AxesImage at 0x244fbcbe9a0>
```



```
In [9]: blended_image = cv2.addWeighted(src1 = img_1,
alpha = .5,
src2 = img_2,
beta = .5,
gamma = 0)
```

```
In [10]: plt.imshow(blended_image)
```

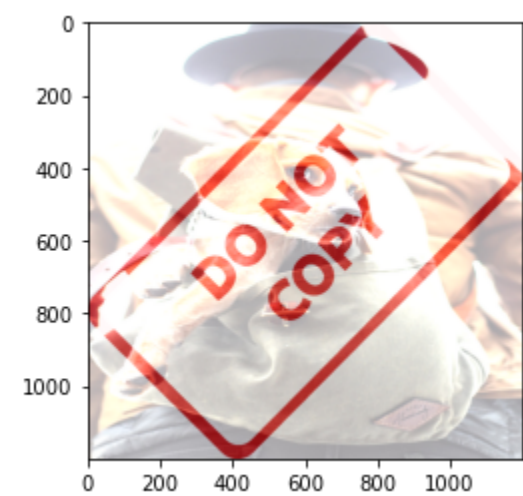
```
Out[10]: <matplotlib.image.AxesImage at 0x244fc73f6d0>
```



```
In [11]: blended_image = cv2.addWeighted(src1 = img_1,
alpha = 1,
src2 = img_2,
beta = .6,
gamma = 0)
```

```
In [12]: plt.imshow(blended_image)
```

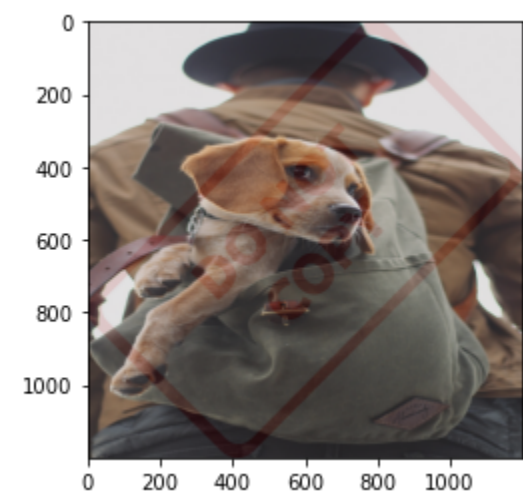
```
Out[12]: <matplotlib.image.AxesImage at 0x244fc79d130>
```



```
In [13]: blended_image = cv2.addWeighted(src1 = img_1,
alpha = .8,
src2 = img_2,
beta = .1,
gamma = 0)
```

```
In [14]: plt.imshow(blended_image)
```

```
Out[14]: <matplotlib.image.AxesImage at 0x244fe16db20>
```

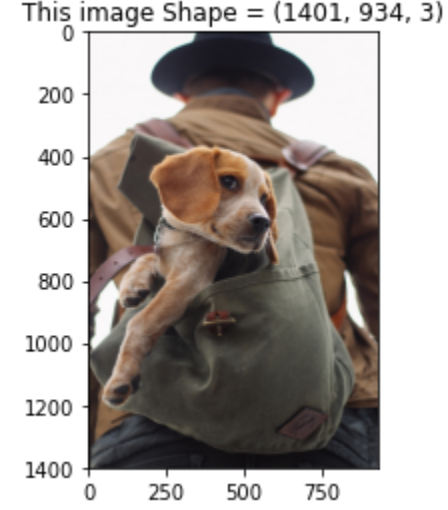


Overlaying Small Images on Top of Large Images Using NumPy Ressionment

```
In [15]: img_1=cv2.imread('dog_backpack.jpg')
img_2=cv2.imread('watermark_no_copy.png')
img_1=cv2.cvtColor(img_1,cv2.COLOR_BGR2RGB)
img_2=cv2.cvtColor(img_2,cv2.COLOR_BGR2RGB)
```

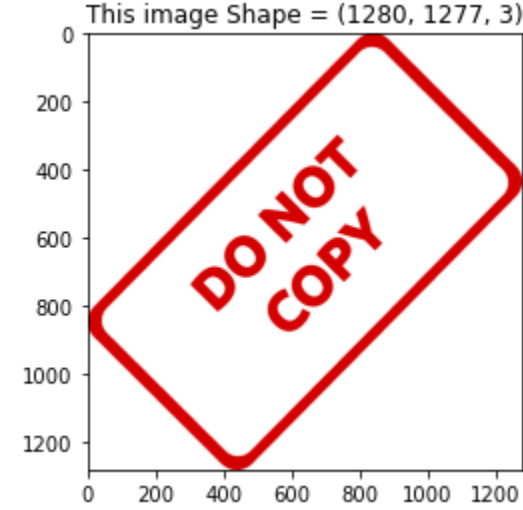
```
In [16]: plt.title("This image Shape = {img_1.shape}")
plt.imshow(img_1)
```

```
Out[16]: <matplotlib.image.AxesImage at 0x244fe1af430>
```



```
In [17]: plt.title("This image Shape = {img_2.shape}")
plt.imshow(img_2)
```

```
Out[17]: <matplotlib.image.AxesImage at 0x244fc6e8040>
```

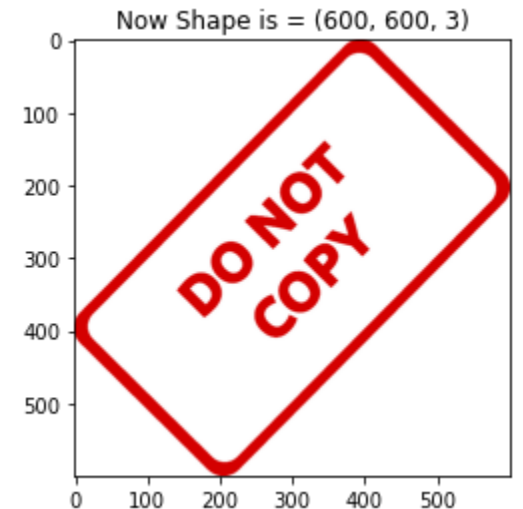


```
In [18]: img_2_small_image = cv2.resize(img_2,(600,600)).copy()
```

```
In [19]: img_1_large_image = img_1.copy()
```

```
In [20]: plt.title("Now Shape is = {img_2_small_image.shape}")
plt.imshow(img_2_small_image)
```

```
Out[20]: <matplotlib.image.AxesImage at 0x244800116a0>
```



```
In [21]: x_offset = 0
y_offset = 0
```

```
In [22]: img_2_small_image.shape
```

```
Out[22]: (600, 600, 3)
```

```
In [23]: x_end = x_offset + img_2_small_image.shape[1]
y_end = y_offset + img_2_small_image.shape[0]
```

```
In [24]: new_image = img_1_large_image.copy()
new_image[y_offset:y_end, x_offset:x_end] = img_2_small_image
```

```
In [25]: plt.imshow(new_image)
```

```
Out[25]: <matplotlib.image.AxesImage at 0x244fbc8d30>
```



```
In [26]: x_offset = 200
y_offset = 350
```

```
In [27]: x_end = x_offset + img_2_small_image.shape[1]
y_end = y_offset + img_2_small_image.shape[0]
```

```
In [28]: new_image = img_1_large_image.copy()
new_image[y_offset:y_end, x_offset:x_end] = img_2_small_image
```

```
In [29]: plt.imshow(new_image)
```

```
Out[29]: <matplotlib.image.AxesImage at 0x244fc2773d0>
```

