

ImageFilter 활용

I3주차_01_03

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학습목표

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- ▶ ImageFilter 활용하기
- ▶ 이미지에 효과 넣는 기능 이해하고 활용하기

ImageFilter Module(I)

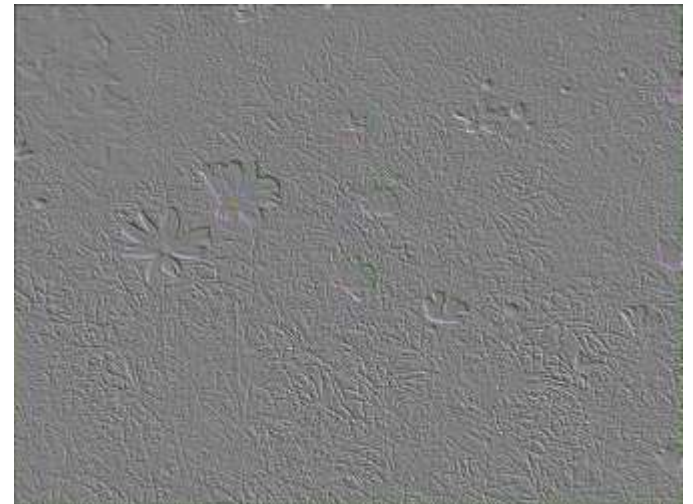
3

```
from PIL import Image, ImageFilter

try:
    im01 = Image.open("flower03.jpg")
except IOError as err:
    print("unable to load image")

im02 = im01.filter(ImageFilter.BLUR)
im03 = im01.filter(ImageFilter.EMBOSS)

im02.show()
im03.show()
```



ImageFilter Module(2)

4

```
from PIL import Image
from PIL import ImageFilter

try:
    img = Image.open("./dog.jpg")

except IOError as err:
    print("unable to load image")

blur_img = img.filter(ImageFilter.BLUR)

img.show()
blur_img.show()
```



ImageFilter Module(3)

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```
from PIL import Image, ImageFilter
```

```
try:
```

```
    im01 = Image.open("flower03.jpg")
```

```
except IOError as err:
```

```
    print("unable to load image")
```

```
im04 = im01.filter(ImageFilter.CONTOUR)
```

```
im05 = im01.filter(ImageFilter.EDGE_ENHANCE)
```

```
im04.show()
```

```
im05.show()
```



ImageFilter Module(4)

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```
from PIL import Image, ImageFilter

try:
    im01 = Image.open("flower03.jpg")
except IOError as err:
    print("unable to load image")

im06 = im01.filter(ImageFilter.SHARPEN)
im07 = im01.filter(ImageFilter.MinFilter)

im06.show()
im07.show()
```



ImageFilter Module(5)

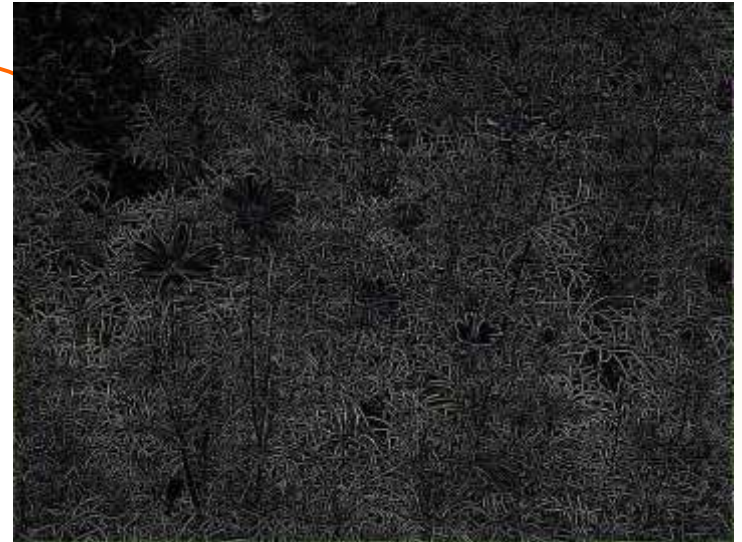
7

```
from PIL import Image, ImageFilter

try:
    im01 = Image.open("flower03.jpg")
except IOError as err:
    print("unable to load image")

im08 = im01.filter(ImageFilter.FIND_EDGES)
im09 = im01.filter(ImageFilter.SMOOTH)

im08.show()
im09.show()
```



연습문제 I

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- ▶ 같은 모드, 같은 픽셀 크기 사진을 2개 준비한다
- ▶ 다음과 같이 시도한 후 화면에 띄운다
 - ▶ `.blend(file1, file2, 0.3)`
 - ▶ `.blend(file1, file2, 0.7)`
- ▶ 원 이미지



연습문제 I 코드

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```
from PIL import Image

try:
    im = Image.open("hill.jpg")
    im01 = Image.open("mountain.jpg")
except IOError as err:
    print("unable to load image")

im_bl=Image.blend(im, im01, 0.3)
im_bl.show()
im_bl=Image.blend(im, im01, 0.7)
im_bl.show()

im_bl.save('im_blend.jpg')
```



강의 요약

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- ▶ ImageFilter 활용하기
 - ▶ .BLUR
 - ▶ .EMBOSS
 - ▶ .SHARPEN
 - ▶ .FIND_EDGES

목표 달성 질문

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- ▶ 다음 이미지 필터의 기능을 설명하시오
 - ▶ .FIND_EDGES
 - ▶ .SMOOTH

감사합니다

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