

IceMan - Compositing

The basic image merging operations defined by Porter and Duff in their 1984 paper, with a couple of additions. All these operations are methods of *Image* and return a new *Image* instance.

Each of the following operations is illustrated with these foreground and background images:

ice.Image Over(*fg*)

The image being operated on is the background image.

Parameters

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.Over(fg)
```

ice.Image Cover(*fg*)

Correlated Over operation. Similar to Over, but works better for correlated subpixel coverage.

Parameters

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.Cover(fg)
```

ice.Image MergeAtop(*fg*)

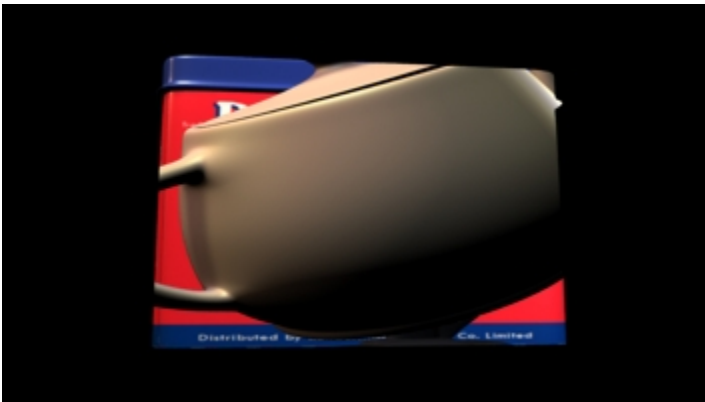
Merge "atop".

Parameters

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.MergeAtop(fg)
```

ice.Image In(*fg*)

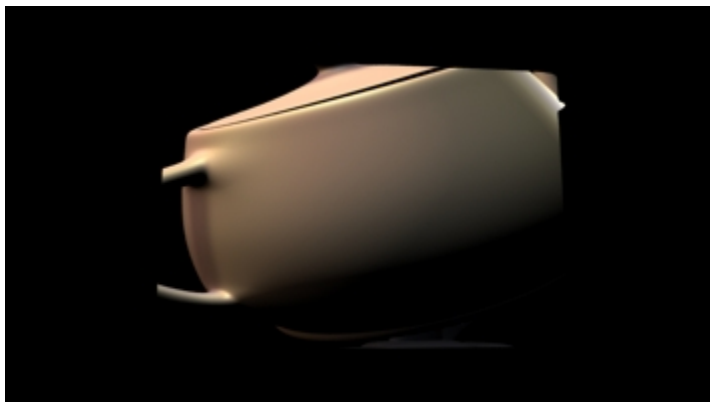
Merge "in".

Parameters

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.MergeXOR(fg)
```

ice.Image MergeXOR(*fg*)

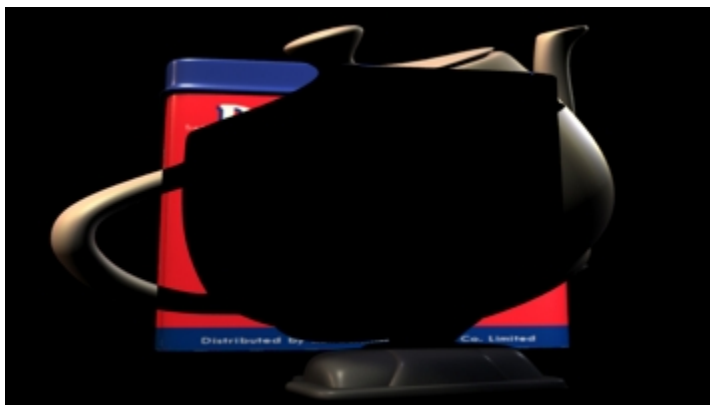
Merge XOR operation.

Parameters

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.MergeXOR(fg)
```

ice.Image Out(*fg*)

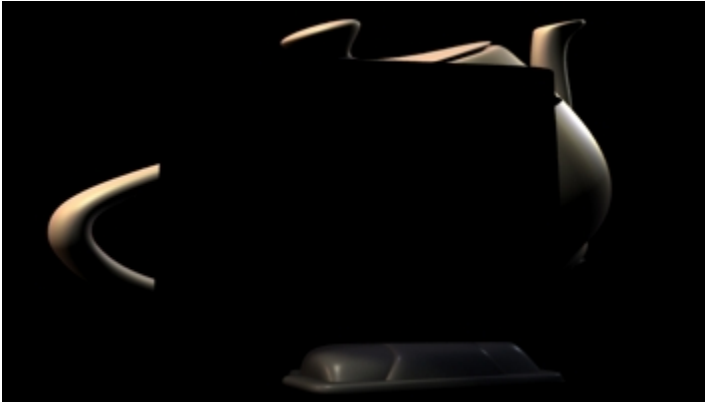
Merge out operation.

Parameters

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.Out(fg)
```

ice.Image TransmissionFilter(*fg*)

In this operation, the foreground acts as a color filter for the background.

Parameter

fg

Foreground image (ice.Image).

Example



```
fg = ice.Load('teapot.tif')
bg = ice.Load('tinbox.tif')
result = bg.TransmissionFilter(fg)
```

ice.Image AlphaDivide()

Divide image by alpha channel.

ice.Image AlphaMultiply()

Multiply image by alpha channel.