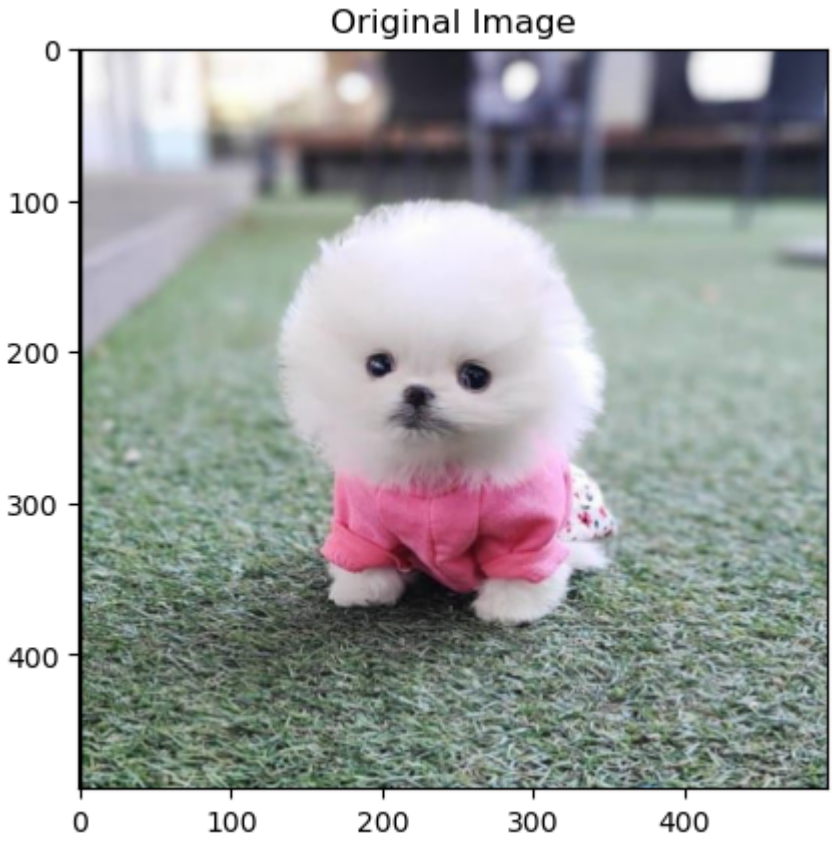
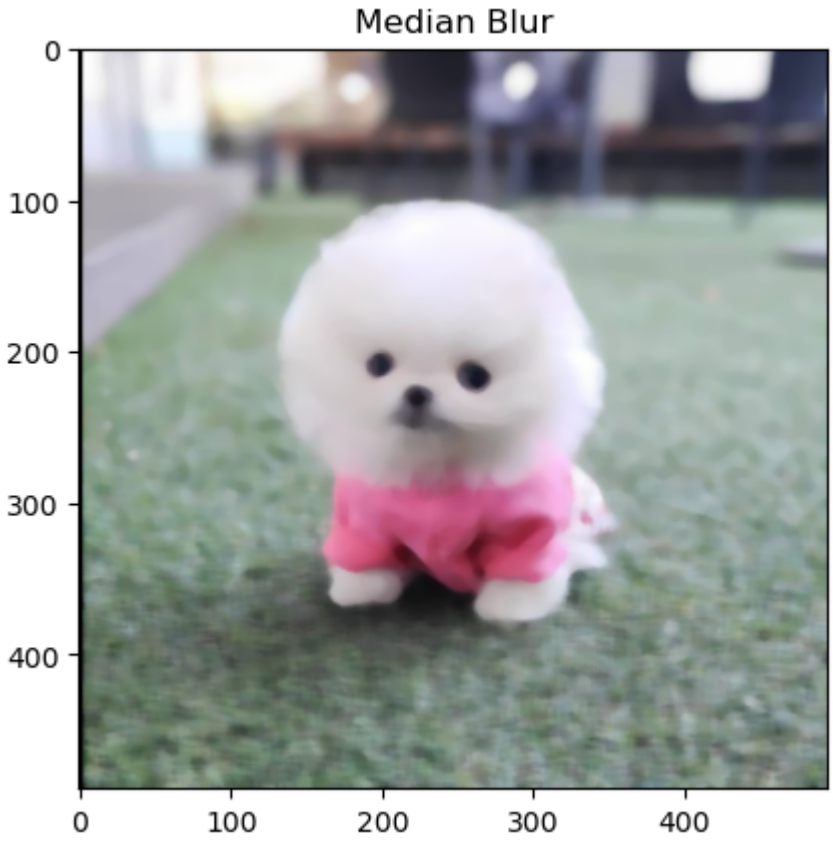
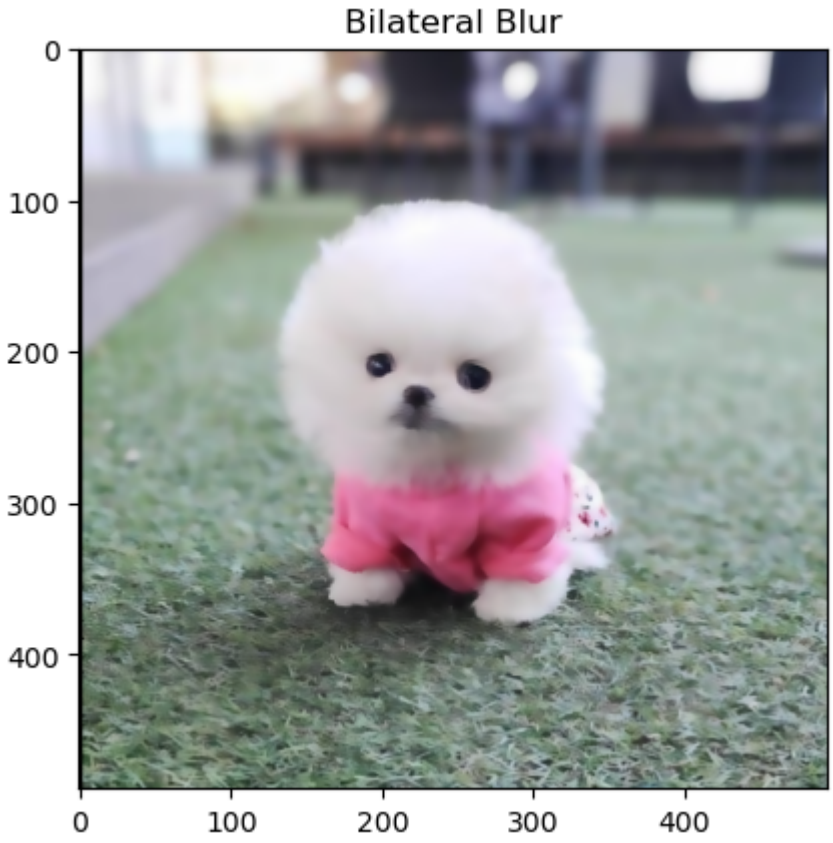
In [14]:
```
import cv2
import numpy as np
from skimage import io
import matplotlib.pyplot as plt


image_Original = cv2.imread(r"C:\Users\A S SAI THEJASWINI\Pictures\Screenshots\S
image_MedianBlur = cv2.imread(r"C:\Users\A S SAI THEJASWINI\Pictures\Screenshots
image_GaussianBlur = cv2.imread(r"C:\Users\A S SAI THEJASWINI\Pictures\Screensho
image_BilateralBlur = cv2.imread(r"C:\Users\A S SAI THEJASWINI\Pictures\Screensh

image_MedianBlur = cv2.medianBlur(image_MedianBlur, 9)
image_GaussianBlur = cv2.GaussianBlur(image_GaussianBlur, (9,9), 10)
image_BilateralBlur = cv2.bilateralFilter(image_BilateralBlur, 9, 100, 75)

image_Original = cv2.cvtColor(image_Original, cv2.COLOR_BGR2RGB)
image_MedianBlur = cv2.cvtColor(image_MedianBlur, cv2.COLOR_BGR2RGB)
image_GaussianBlur = cv2.cvtColor(image_GaussianBlur, cv2.COLOR_BGR2RGB)
image_BilateralBlur = cv2.cvtColor(image_BilateralBlur, cv2.COLOR_BGR2RGB)

plt.figure(0)
plt.imshow(image_Original)
plt.title('Original Image')

plt.figure(1)
plt.imshow(image_MedianBlur)
plt.title('Median Blur')

plt.figure(2)
plt.imshow(image_GaussianBlur)
plt.title('Gaussian Blur')

plt.figure(3)
plt.imshow(image_BilateralBlur)
plt.title('Bilateral Blur')

plt.show()
```


Original Image
0
100
200
300
400
0
100
200
300
400

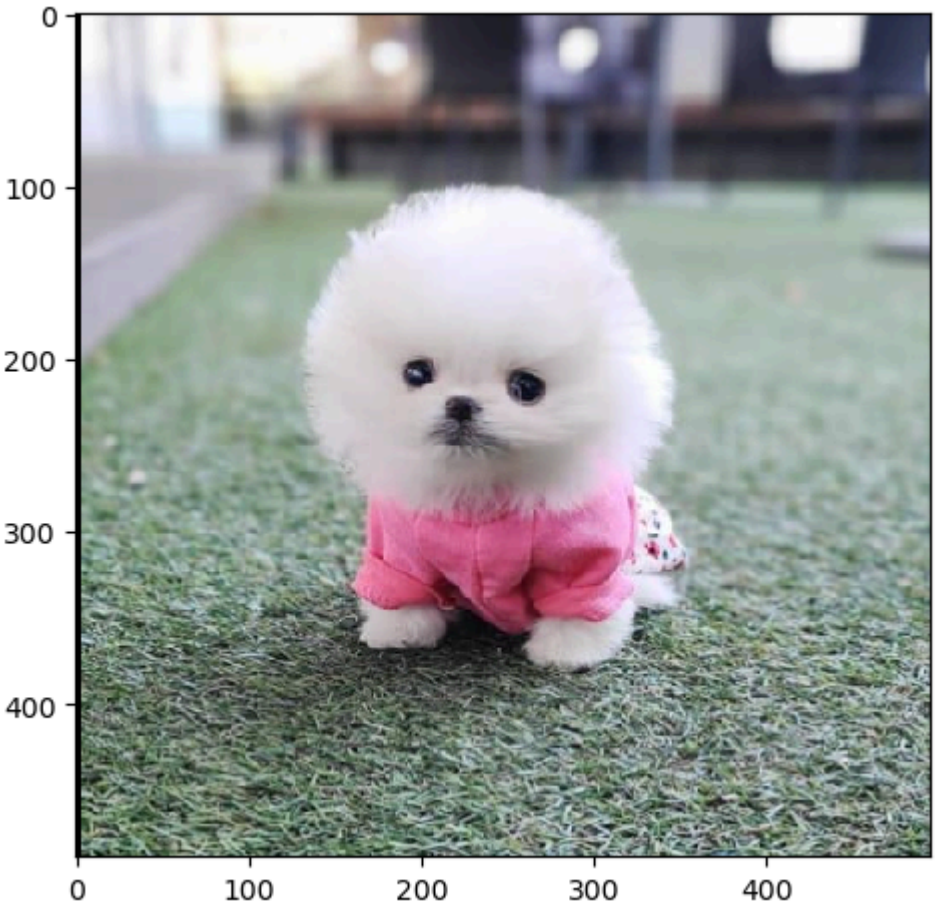

Median Blur
0
100
200
300
400
0
100
200
300
400

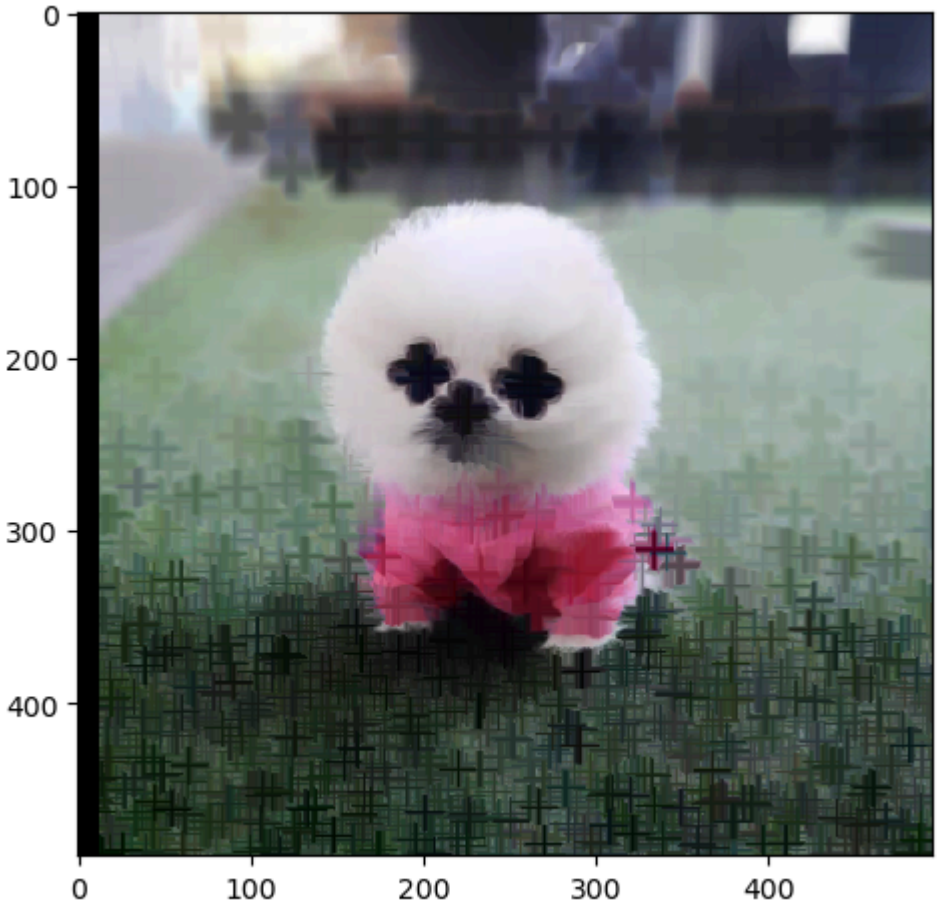


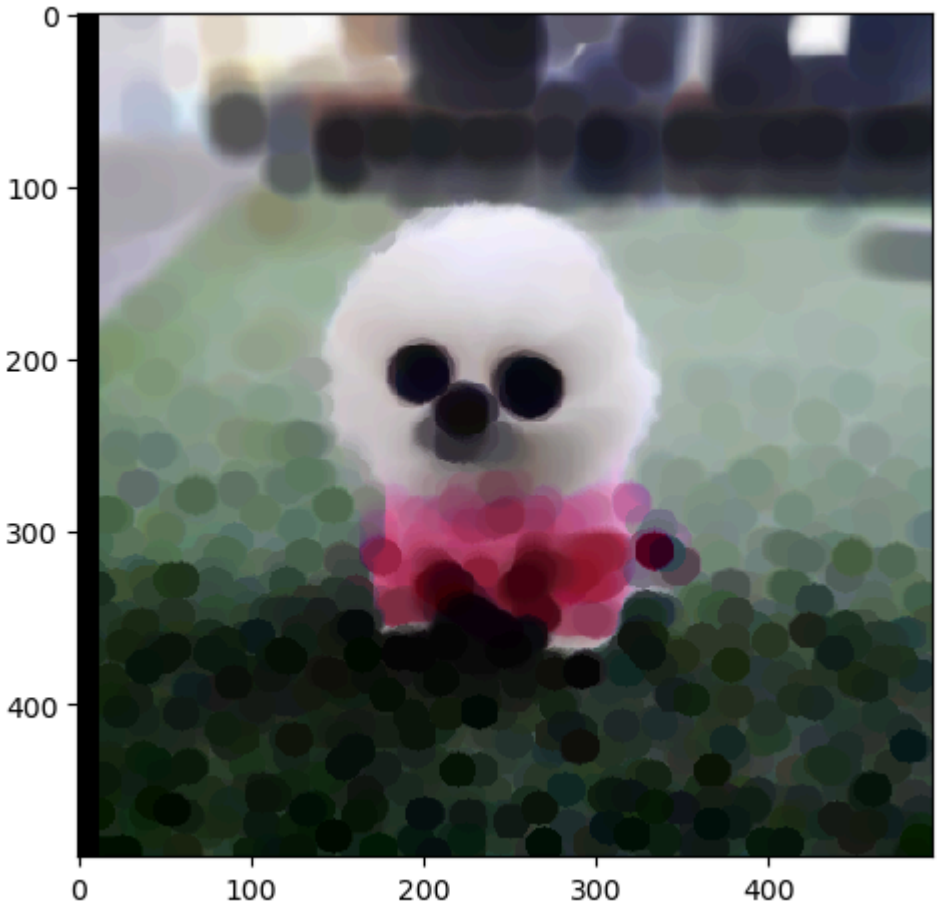
In [9]:
```
s1 = 0
s2 = 10
s3 = 10

t1 = cv2.MORPH_RECT
t2 = cv2.MORPH_CROSS
t3 = cv2.MORPH_ELLIPSE
```

```
tmp1 = cv2.getStructuringElement(t1, (2*s1 + 1, 2*s1+1), (s1, s1))
tmp2= cv2.getStructuringElement(t2, (2*s2 + 1, 2*s2+1), (s2, s2))
tmp3 = cv2.getStructuringElement(t3, (2*s3 + 1, 2*s3+1), (s3, s3))

final1 = cv2.erode(image_Original, tmp1)
final2 = cv2.erode(image_Original, tmp2)
final3 = cv2.erode(image_Original, tmp3)

plt.figure(0)
io.imshow(final1)
plt.figure(1)
io.imshow(final2)
plt.figure(2)
io.imshow(final3)
```

Out[9]: <matplotlib.image.AxesImage at 0x1a4ec7e3650>



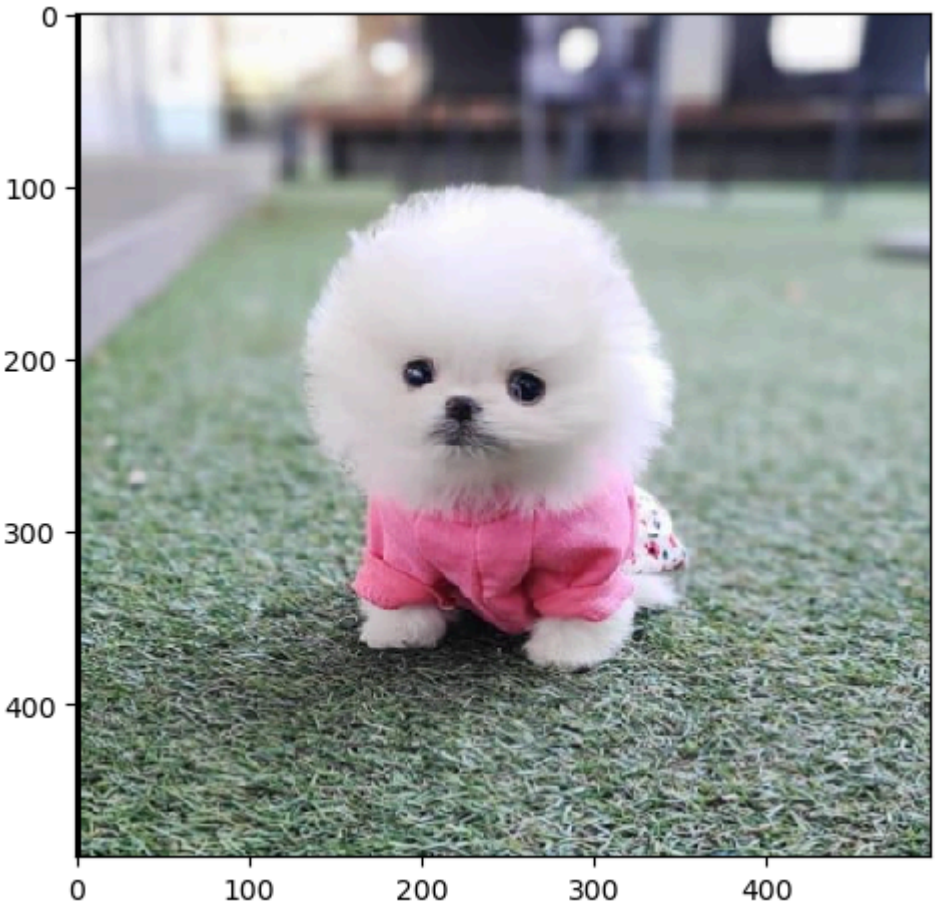


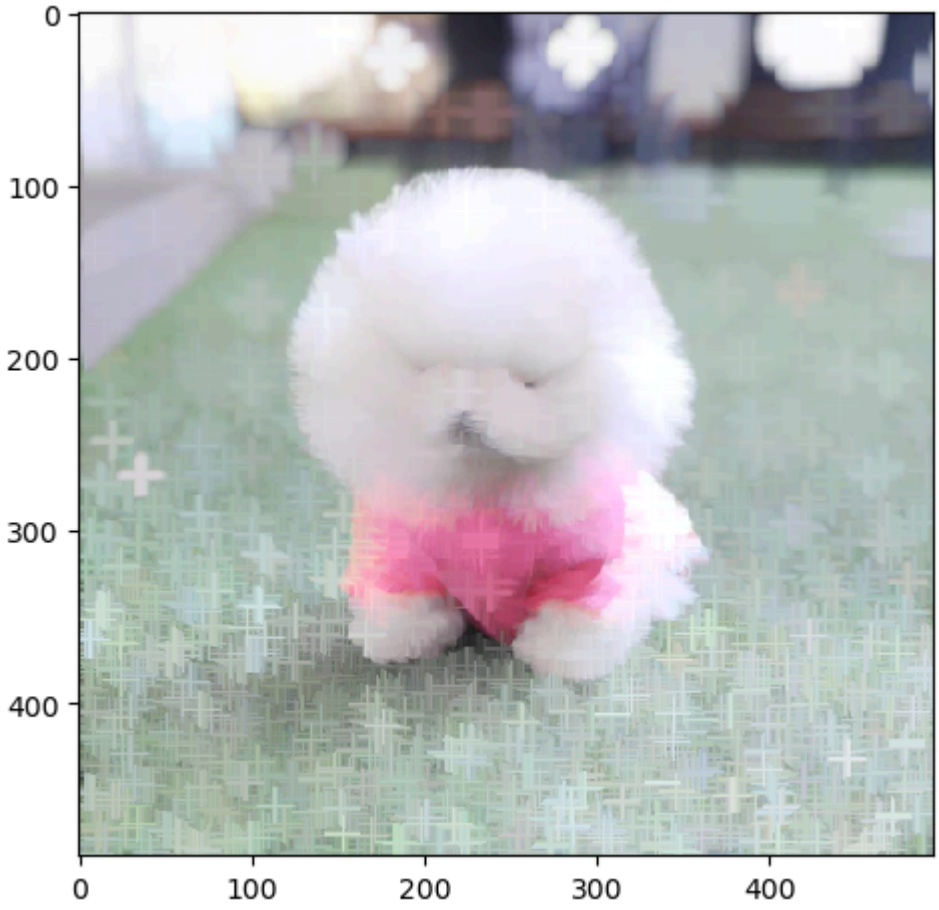


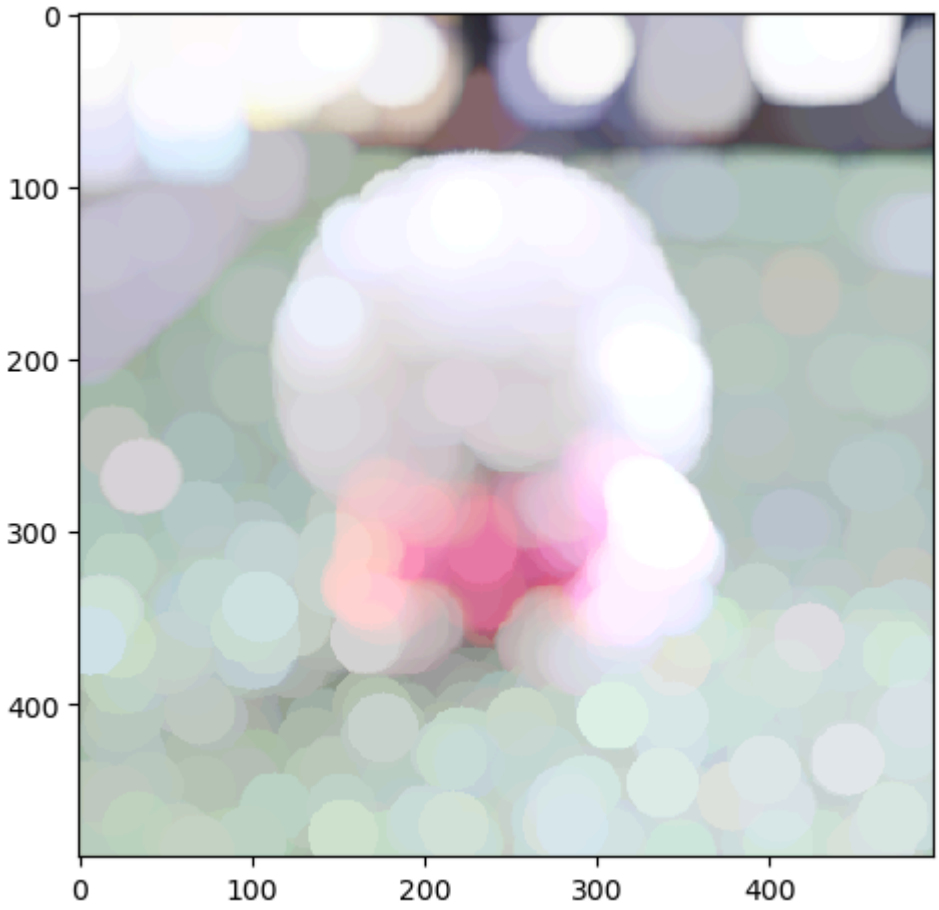
In [11]:
```
d1 = 0
d2 = 10
d3 = 20
```

```
#Define dilation type
t1 = cv2.MORPH_RECT
t2 = cv2.MORPH_CROSS
t3 = cv2.MORPH_ELLIPSE
#Store the dilation templates
tmp1 = cv2.getStructuringElement(t1, (2*d1 + 1, 2*d1+1), (d1, d1))
tmp2 = cv2.getStructuringElement(t2, (2*d2 + 1, 2*d2+1), (d2, d2))
tmp3 = cv2.getStructuringElement(t3, (2*d3 + 1, 2*d3+1), (d3, d3))
#Apply dilation to the images
final1 = cv2.dilate(image_Original, tmp1)
final2 = cv2.dilate(image_Original, tmp2)
final3 = cv2.dilate(image_Original, tmp3)
#Show the images
plt.figure(0)
io.imshow(final1)

plt.figure(1)
io.imshow(final2)
plt.figure(2)
io.imshow(final3)
```

Out[11]: <matplotlib.image.AxesImage at 0x1a4ed3f85c0>




0
100
200
300
400
0
100
200
300
400


0
100
200
300
400
0
100
200
300
400

In [ ]:

In [ ]: